ORIGINAL

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February 27, 2004

Ernest Johnson, Director
Utilities Division
Arizona Corporation Commission
1200 West Washington
Phoenix, AZ 85007

Re: Panda Gila River, L.P.
CEC Conditions – Commission Decision Nos. 62730; 62970
Docket No. L-00000Q-00-0099

Dear Mr. Johnson:

This self-certification letter is intended to address the status of the conditions set forth in the Certificate of Environmental Compatibility ("CEC") originally issued to Panda Gila River, L.P. ("Gila River") on June 30, 2000, and amended on October 26, 2000. Gila River, whom this firm represents, has requested that the following information be provided to the Commission.

Condition No. 1: The Applicant and its assignees shall comply with all existing applicable air and water pollution control standards and regulations, and with all existing applicable ordinances, master plans and regulations of the State of Arizona, the County of Maricopa, the Town of Gila Bend, the United States, and any other governmental entities having jurisdiction.

Response No. 1: Gila River is complying with all existing applicable air and water pollution control standards and regulations, and with all existing applicable ordinances, master plans, and regulations of the State of Arizona, the County of Maricopa, the Town of Gila Bend, the United States, and any other governmental entity having jurisdiction. Although the Gila River Power Station ("GRPS") has recently submitted a request to amend portions of its Air Quality permit with the Maricopa County Environmental Services Department and the U.S. Environmental Protection Agency, GRPS is currently in compliance as referenced above. Please see Attachment No. 1, Air Quality Compliance Summary.

Condition No. 2: This authorization to construct the Project will expire five (5) years from the date the Certificate is approved by the Arizona Corporation Commission unless construction is completed to the point that the project is capable of operating at its rated capacity by that time; provided, however, that prior to such expiration the Project owner may request that the Arizona Corporation Commission extend its time limitation.

Response No. 2: Construction of the GRPS Project ("Project) was completed in July, 2003, and the plant became fully operational in August 2003.

Condition No. 3: Applicant's project having two (2) or more approved transmission lines emanating from its power plant's transmission switchyard and interconnecting with the existing transmission system. This plant interconnection must satisfy the single contingency outage criteria (N-1) without reliance on remedial action such as generator unit tripping or load shedding.

Response No. 3: Construction of the Project proceeded consistent with the design of the Project, which included at least two transmission lines emanating from the Project's transmission switchyard and interconnecting with the existing transmission system. This work has been completed and energized. Gila River is interconnected to the Arizona transmission network at both 500 kV and the 230 kV levels by three separate transmission lines. Interconnection to the 500 kV transmission network is via two dedicated 20-mile long lines, either of which can carry the entire plant output, to the new Jojoba substation, which became operational in November 2002. In addition, the station connects to the 230 kV transmission network via a 500/230 kV transformer to the new APS 230 kV Gila River substation that intersects the APS Liberty to Gila Bend line.

Condition No. 4: Applicant providing to the Commission a technical study regarding the sufficiency of transmission capacity to the plant. Applicant agrees to satisfy this condition for its facility prior to commencement of construction, and to provide an updated technical study regarding the sufficiency of transmission capacity to the plant not more than 12 months prior to the commercial operation of the plant.

Response No. 4: ICF Consulting was retained by Gila River to perform the transmission capacity study for Gila River. All studies have been previously submitted to the Arizona Corporation Commission's ("Commission") Engineering Staff, and remain on file with the Commission.

Condition No. 5: Applicant submitting to the Commission an interconnection agreement with the transmission provider with whom it is interconnecting.

Response No. 5: Gila River has already submitted its Generator Interconnection Facilities Construction Agreement between Arizona Public Service and Gila River, effective October 31, 2000, and Interconnection and Operating Agreement, effective December 22, 2000.

Condition No. 6: Applicant or one of its affiliates becoming a member of WSCC, or its successor, and filing a copy of its WSCC Reliability Criteria Agreement or Reliability Management System (RMS) Generator Agreement with the Commission.

Response No. 6: Gila River became a Class 3 member of the Western Electricity Coordinating Council ("WECC") on October 15, 2002. Gila River also signed its Reliability Management System Agreement with APS on March 15, 2002.

Condition No. 7: Applicant using commercially reasonable efforts to become a member of the Southwest Reserve Sharing Group, or its successor, thereby making its units available for reserve sharing purposes, subject to competitive pricing.

Response No. 7: Gila River is a member of the Southwest Reserve Sharing Group.

Condition No. 8: Conditions 3-7 above shall automatically terminate if they or substantially similar conditions are not included in future generating facility Certificates of Environmental Compatibility as approved by the Commission or upon any subsequent amendment or invalidation by the Commission or a reviewing court.

Response No. 8: No action is required.

Condition No. 9: If human remains and/or funerary objects are encountered during the course of any ground disturbing activities related to the development of the subject property, Applicant shall cease work and notify the Director of the Arizona state Museum in accordance with A.R.S. § 41-685.

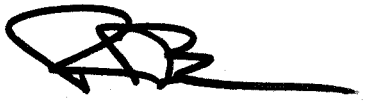
Response No. 9: No human remains and/or funerary objects were encountered during construction of the Project.

Condition No. 10: Applicant shall implement a land management and reclamation plan in accordance with requirements of the Annexation-Development Agreement to be executed between Applicant and the Town of Gila Bend.

Response No. 10: Gila River has implemented the land management and reclamation plan as originally prepared. All 770 acres have been drill seeded. The berm designs have been completed, and trees on the berms have been planted. All landscaping work at the Administration building and the plant entrance have also been completed.

If you have any questions concerning the above information, or need additional information, please let us know. Thank you for you time and consideration in this matter.

Sincerely,



Patrick J. Black

PBLA/clv
Attachment
cc w/attachment: Chairman Marc Spitzer
Commissioner William A. Mundell
Commissioner Mike Gleason
Commissioner Jeff Hatch-Miller
Commissioner Kristin K. Mayes
Jerry Smith, Engineering Division
Richard Lehfeldt, TECO Energy
David Crabtree, TECO Energy
Docket Control

1518269.1/73262.005

AIR QUALITY COMPLIANCE SUMMARY
GILA RIVER POWER STATION

BACKGROUND

Panda Gila River, LP owns and operates the Gila River Power Station ("GRPS"). The original Title V Air Quality Permit for the GRPS was issued in 2001. That permit contained emissions limits relating to normal operations and separate emissions limits for "startup/shutdown." The startup/shutdown emissions limits were based upon engineering estimates, projections and best available information from the manufacturer of the turbines used in the combined cycle systems. The startup/shutdown emissions limits were approved by the Maricopa County Environmental Services Department ("MCESD") and the Environmental Protection Agency (EPA) as representing "Best Available Control Technology." The maximum startup/shutdown time allowed under the permit is 600 hours per turbine, while the maximum normal operating time is 8720 hours per year per turbine.

Over the next two years, GRPS was constructed. Between January 2003 and May 2003, each of the eight combined cycle turbines ("CT") were initially started. Under the applicable air quality regulations, GRPS had 180 days from initial startup of each CT for shakedown of the system, tuning the turbine, etc. to ensure compliance with the air quality permit requirements. The air permit also required compliance tests to be conducted to confirm that the CT's could meet the emissions limits set forth in the permit. Between May 2003 and July 2003, the facility conducted compliance tests on all eight CT's and all CT's passed the compliance test requirements for normal operations. There was and is no test for startup emissions compliance.

On October 21, 2003, an inspector from MCESD visited the site. As a result of that inspection, several issues were identified, including (1) an apparent exceedance of the 20% opacity limit for two of the CT, one on October 20 (for 25%) and one on October 21 (for 20.8%); (2) an apparent exceedance of the startup emissions limits for several of the units on October 21 relating to NOx and CO; and (3) the failure to submit a document several years earlier advising MCESD concerning the exact date of start of construction of the facility. MCESD forwarded notices of violation ("NOV's") to Panda Gila River, LP, which were received on December 15, 2003.

Following personnel absences due to the Christmas holidays, Panda Gila River, LP's engineers reviewed the NOV's in early January 2004. That review indicated that the issue of startup emissions for NOx and CO was a systemic or design problem. As a result, on January 5, 2004, GRPS shut down for several days in order to allow the engineers to analyze in greater detail what needed to be done to ensure the facility did not violate the startup emissions limits.

MINOR PERMIT REVISION APPLICATION

On January 11, 2004, the facility submitted a minor permit revision application to MCESD requesting an increase in the NOx and CO startup emissions limits. GRPS requested an increase in the CO startup emissions limit from 42.4 lb/hr to 100 lb/hr and an increase in the

NOx startup emissions limit from 120 lb/hr to 230 lb/hr for Nox. A copy of the application was also submitted to EPA and a copy is attached as Exhibit 1.

Because the increases requested by the GRPS were less than increases requested by several other CT electricity generating facilities that had had similar startup issues (Redhawk and Harquahala) and because those other facilities had been allowed by MCESD and EPA to increase their startup emissions limits using the minor permit revision process, GRPS was confident that its request also qualified as a minor permit revision.

NON-MINOR PERMIT REVISION APPLICATION

Approximately three weeks after submittal, EPA advised MCESD and GRPS that, based upon a new interpretation, EPA believed that the application had to be processed as a non-minor permit revision application, which includes public comment and an opportunity for public hearing. Rather than debate the interpretation issue with EPA, GRPS decided the most efficient way to resolve the issue was to resubmit the minor permit revision application as a non-minor permit revision application. Consequently on February 9, 2004, a non-minor permit revision application was submitted to MCESD and EPA. A copy is attached as Exhibit 2.

ORDER OF ABATEMENT BY CONSENT

At the same time, in order to allow the facility to continue to operate, while the non-minor permit application was being processed, GRPS entered into an Order of Abatement by Consent with MCESD, as authorized under the Maricopa County Air Quality Control Regulations. (A copy of the Order of Abatement by Consent is attached as Exhibit 3.) Under the terms of the Order of Abatement by Consent, GRPS was (1) required to submit a significant permit revision application no later than February 13, 2004 (which it did); (2) required to submit a written plan setting for the operational changes the GRPS was going to take to minimize emissions in the interim (which it did, see Exhibit 4); and (3) required not to exceed certain startup emissions limits for NOx and CO set forth in the Order of Abatement by Consent. The limits set forth in the Order of Abatement of Consent are the same limits that were previously requested in the minor permit revision application and later in the non-minor permit revision application.

CURRENT STATUS

GRPS is currently operating under the terms of and in compliance with the Order of Abatement by Consent issued by MCESD. GRPS's non-minor permit revision application is being processed by MCESD and EPA. Although GRPS was required by EPA to request increases in the NOx and CO startup emissions limits using a non-minor permit revision application, based upon prior increases approved for other facilities in Arizona, GRPS does not anticipate problems concerning the increases. As set forth in the non-minor permit revision application, the increase in startup emissions limits requested by GRPS are lower than the emissions used in the modeling for the original permit which demonstrated that emissions from the facility would not have an adverse impact on the national ambient air quality standards, human health or the environment.

Exhibit 5 is a chart comparing the startup emissions limits being requested by GRPS compared to other power stations in Arizona. As set forth on Exhibit 5, the increase in startup emissions limits for NOx places GRPS in the middle range of startup emissions limits for NOx for similarly situated facilities in Arizona, while the increase in CO startup emissions limits will still result in GRPS having the lowest startup emissions limits for CO of any similarly situated facility in Arizona.

HAND DELIVERED

January 10, 2004

Mr. Dale Lieb
Maricopa County Environmental Services Department
Air Quality Division
1001 N. Central Ave.
Phoenix, AZ 85004

Re: Gila River Power Station
Permit No. V99-018
Minor Permit Revision

Dear Mr. Lieb:

On behalf of Panda Gila River, L.P. (PGR), we are submitting the attached application for a minor permit modification of the existing Title V Operating Permit at Gila River Power Station. The application fee of $300.00 is also enclosed.

This notification of minor modification application is submitted pursuant to Rule 210 Section 301 of the Maricopa County Air Pollution Control Regulations. This submittal constitutes an application by PGR for a minor permit revision to the existing Title V Operating Permit for the PGR Gila River Power Station, located in Maricopa County, Arizona.

The purpose of this minor permit modification application is to correct information submitted with the initial permit application regarding emission rates during startup operation for each of the eight (8) combined cycle combustion turbines. This information was used to develop the facility's construction and operating permit. This minor permit modification application seeks to correct the Nitrogen Oxides (NOx) and Carbon Monoxide (CO) startup emission limits based upon actual continuous emissions monitoring system (CEMS) data recorded during startup, testing, and commissioning of the units. This application does not seek to modify any emission limits that are required by applicable federal rules or the Clean Air Act.

To assist you in the completeness review of this application, the application is organized to follow the standard permit application form. Please call Paul Carpinone at (813) 228-4858, Byron Burrows at (813) 228-1282, or myself at (813) 228-1381 if you have any questions.

Post Office Box 798, Gila Bend, Arizona 85337
PHONE 928/ 683-0020 FAX 928/ 683-0028

Based on information and belief formed after reasonable inquiry, the statements and information in the attached documents are true, accurate, and complete.

Sincerely,

John T. Duff
Vice President

cc: Phil Fargotstein, FC
Dan Baerman, TPS Arizona Operations Co.

Post Office Box 798, Gila Bend, Arizona 85337
PHONE 928/ 683-0020 FAX 928/ 683-0028

Maricopa County
Environmental Services

Air Quality Division
1001 N. Central Ave,
Phoenix, Arizona 85004-1942
Phone: (602) 506-6094
Fax: (602) 506-6985
Web Site: http://www.maricopa.gov/sbeap

NOTIFICATION OF MINOR MODIFICATION AT A CURRENTLY PERMITTED FACILITY

Per Rule 220, Section 405 and Section 406, this notification must be submitted for a currently permitted facility for a minor permit revision. This notification is not required for changes in work schedules or relocation of equipment for similar use within a permitted facility.

Submit this notification prior to making the modifications. If confidentiality is claimed pursuant to ARS §49-487, a fully completed application with confidential information clearly identified along with a separate copy of the application for public review without the confidential information and a written justification for the confidentiality claimed must be submitted. Complete both sides by typing or printing legibly. An application fee of $150.00 must accompany this notification. If the notification is submitted as a result of receiving a Notice of Violation (NOV), an additional $70.00 late fee must be included. Per Rule 280, Section 302, facilities listed in Table A or Table B of Rule 280, Section 403, will be billed later for additional fees, based on the cost to date of reviewing and acting on the permit revision application, minus fees previously submitted with this application.

BUSINESS NAME: **Panda Gila River, L.P.**				EXISTING AIR QUALITY PERMIT NUMBER FOR THIS SITE: **V99-018**
ADDRESS OF SITE: **1250 East Watermelon Rd.**				TELEPHONE AT SITE: **928-683-0110**
CITY: **Gila Bend**		**AZ**	ZIP CODE: **85337**	
CONTACT PERSON: **Paul Carpinone**				TELEPHONE: **813-228-4858**
MAILING ADDRESS: **P.O. Box 111**				FAX: **813-228-1308**
CITY: **Tampa**	STATE: **FL**		ZIP CODE: **33601**	E-MAIL: **plcarpinone@tecoenergy.com**

BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION IN THIS DOCUMENT ARE TRUE, ACCURATE, AND COMPLETE

DATE **01/09/2004** SIGNATURE OF OWNER OR RESPONSIBLE OFFICIAL OF BUSINESS _____

TYPE OR PRINT NAME AND TITLE **John T. Duff, Vice President**

DO NOT WRITE IN THIS SPACE.

REVIEWED BY _____ DATE _____

☐ APPROVED ☐ DISAPPROVED REASON FOR DISAPPROVAL:

_____

_____

1. NARRATIVE DESCRIPTION OF THE PROPOSED MODIFICATION: **Increase combustion turbine NOx and CO allowable hourly startup emission rates to reflect updated information with no increase in annual limits above the PSD significance level.**

2. PROVIDE A LIST OF EQUIPMENT AND EMISSION CONTROL DEVICES WHICH WILL BE INSTALLED OR MODIFIED:

ASSIGNED EQUIPMENT NUMBER	DESCRIBE EACH PIECE OF EQUIPMENT INCLUDE MAKE & MODEL	DATE OF INSTALLATION OR MODIFICATION	HOW MANY	HP, KVA GALLONS OR OTHER RATING (Specify Units)	EXHAUST	
					VENT TO AIR	VENT TO CONTROL (Identify)
1GT-TRB-1100, 1GT-TRB-2100	**Block 1 Comb. Turbines, GE 7FA**	**5/13/03, 5/14/03**	**2**	**170 MW/CT (nom)**		
2GT-TRB-1100, 2GT-TRB-2100	**Block 2 Comb. Turbines, GE 7FA**	**3/22/03, 3/23/03**	**2**	**170 MW/CT (nom)**		
3GT-TRB-1100, 3GT-TRB-2100	**Block 3 Comb. Turbines, GE 7FA**	**3/07/03, 3/08/03**	**2**	**170 MW/CT (nom)**		
4GT-TRB-1100, 4GT-TRB-2100	**Block 4 Comb. Turbines, GE 7FA**	**1/22/03, 1/20/03**	**2**	**170 MW/CT (nom)**		

3. MATERIALS LIST: List all materials handled, stored, processed, used, mixed, treated, or emitted. Include chemicals, mixtures, resins, cleaning compounds, etc., in this list. Identify each material in sufficient detail and provide material safety data sheets (MSDS).

MATERIAL	ANNUAL USAGE OR THROUGHPUT	CHEMICAL COMPOSITION (% by weight)	EQUIPMENT NUMBER IN WHICH USED
No additional materials required.			

4. DESCRIBE CONTROL DEVICES

TYPE OF DEVICE	NAME / ID	GAS FLOW RATE SCFM	LIQUID FLOW RATE GAL/MIN	CONTROL EFFICIENCY (% WEIGHT)
Not applicable.				

5. MATERIALS RECLAIMED OR SHIPPED AS WASTE:

Not applicable.

IF APPLICABLE, COMPLETE THE ATTACHED SECTION Z-1.

SECTION Z-M. AIR POLLUTANT EMISSIONS

PROVIDE A SUMMARY OF THE ACTUAL AIR EMISSIONS ON AN ANNUAL BASIS FOR THE FOLLOWING THREE COLUMNS:

(i) ONLY THE EQUIPMENT AND PROCESSES DESCRIBED ON THIS NOTIFICATION.

(ii) THE ENTIRE SITE PRIOR TO THE INSTALLATION OF THE EQUIPMENT AND PROCESSES DESCRIBED IN (i) ABOVE.

(iii) THE ENTIRE SITE INCLUDING THE EMISSIONS IDENTIFIED IN (i) ABOVE. NORMALLY, THIS COLUMN WILL BE THE SUM OF COLUMNS (i) AND (ii).

	ACTUAL EMISSIONS OR PROJECTED ACTUAL EMISSIONS IN POUNDS PER YEAR		
	COLUMN (i)	COLUMN (ii)	COLUMN (iii)
CARBON MONOXIDE (CO)	60,000	880,000	1,065,600
OXIDES OF NITROGEN (NO_X)	No change	No change	No change
OXIDES OF SULFUR (SO_X)	No change	No change	No change
PARTICULATES OF 10 MICRONS OR SMALLER (PM_{10})	No change	No change	No change
TOTAL SUSPENDED PARTICULATES (TSP), INCLUDING PM_{10}	No change	No change	No change
TOTAL VOLATILE ORGANIC COMPOUNDS (VOC) EXCLUDING NON-PRECURSOR ORGANIC COMPOUNDS	No change	No change	No change
NON-PRECURSOR ORGANIC COMPOUNDS	No change	No change	No change
LEAD	No change	No change	No change
OTHER AIR POLLUTANTS (LIST EACH ONE SEPARATELY):			
	No change	No change	No change

Attach detailed calculations to support the figures in the above summary table. Do not include the emissions from motor vehicles. Do include the emissions from stationary sources, portable sources, test areas, experimental facilities, evaporative losses, storage and handling losses, fuel loading and unloading losses, etc. Specifically identify the following in detailed calculations:

EMISSIONS FROM EACH POINT SOURCE AND EACH STACK
FUGITIVE EMISSIONS
CAPTURE EFFICIENCIES
CONTROL EFFICIENCIES
OVERALL EFFICIENCIES

For particulate emissions, describe the types of particulates being emitted and the quantities of emissions for each type. Identify and quantify each and every type of VOC, precursor as well as non-precursor, that is included in the above summary table. "Other air pollutants" include, but are not limited to: bromine, iodine, ammonia, hydrogen sulfide, arsine, diborane, silane, acid fumes, alkaline fumes, metal fumes and any Federal Hazardous Air Pollutant that is emitted in excess of 500 pounds per year. Wherever a material is identified by a trade name, also provide its generic name and its chemical abstract service (CAS) number.

FEDERAL HAZARDOUS AIR POLLUTANTS LIST

CAS No.	Chemical name
75070	Acetaldehyde
60355	Acetamide
75058	Acetonitrile
98862	Acetophenone
53963	2-Acetylaminofluorene
107028	Acrolein
79061	Acrylamide
79107	Acrylic acid
107131	Acrylonitrile
107051	Allyl chloride
92671	4-Aminobiphenyl
62533	Aniline
90040	o-Anisidine
1332214	Asbestos
71432	Benzene (including benzene from gasoline)
92875	Benzidine
98077	Benzotrichloride
100447	Benzyl chloride
92524	Biphenyl
117817	Bis(2-ethylhexyl)phthalate (DEHP)
542881	Bis(chloromethyl)ether
75252	Bromoform
106990	1,3-Butadiene
156627	Calcium cyanamide
105602	Caprolactam
133062	Captan
63252	Carbaryl
75150	Carbon disulfide
56235	Carbon tetrachloride
463581	Carbonyl sulfide
120809	Catechol
33904	Chloramben
57749	Chlordane
7782505	Chlorine
79118	Chloroacetic acid
532274	2-Chloroacetophenone
108907	Chlorobenzene
510156	Chlorobenzilate
67663	Chloroform
107302	Chloromethyl methyl ether
126998	Chloroprene
1319773	Cresols/Cresylic acid (isomers and mixture)
95487	o-Cresol
108394	m-Cresol
106445	p-Cresol
98828	Cumene
94757	2,4-D, salts and esters
3547044	DDE
334883	Diazomethane
132649	Dibenzofurans
96128	1,2-Dibromo-3-chloropropane
84742	Dibutylphthalate
106467	1,4-Dichlorobenzene(p)
91941	3,3-Dichlorobenzidene
111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)
542756	1,3-Dichloropropene
62737	Dichlorvos

CAS No.	Chemical name
111422	Diethanolamine
121697	N,N-Diethyl aniline (N,N-Dimethylaniline)
64675	Diethyl sulfate
119904	3,3-Dimethoxybenzidine
60117	Dimethyl aminoazobenzene
119937	3,3'-Dimethyl benzidine
79447	Dimethyl carbamoyl chloride
68122	Dimethyl formamide
57147	1,1-Dimethyl hydrazine
131113	Dimethyl phthalate
77781	Dimethyl sulfate
534521	4,6-Dinitro-o-cresol, and salts
51285	2,4-Dinitrophenol
121142	2,4-Dinitrotoluene
123911	1,4-Dioxane (1,4-Diethyleneoxide)
122667	1,2-Diphenylhydrazine
106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane)
106887	1,2-Epoxybutane
140885	Ethyl acrylate
100414	Ethyl benzene
51796	Ethyl carbamate (Urethane)
75003	Ethyl chloride (Chloroethane)
106934	Ethylene dibromide (Dibromoethane)
107062	Ethylene dichloride (1,2-Dichloroethane)
107211	Ethylene glycol
151564	Ethylene imine (Aziridine)
75218	Ethylene oxide
96457	Ethylene thiourea
75343	Ethylidene dichloride (1,1-Dichloroethane)
50000	Formaldehyde
76448	Heptachlor
118741	Hexachlorobenzene
87683	Hexachlorobutadiene
77474	Hexachlorocyclopentadiene
67721	Hexachloroethane
822060	Hexamethylene-1,6-diisocyanate
680319	Hexamethylphosphoramide
110543	Hexane
302012	Hydrazine
7647010	Hydrochloric acid
7664393	Hydrogen fluoride (Hydrofluoric acid)
123319	Hydroquinone
78591	Isophorone
58899	Lindane (all isomers)
108316	Maleic anhydride
67561	Methanol
72435	Methoxychlor
74839	Methyl bromide (Bromomethane)
74873	Methyl chloride (Chloromethane)
71556	Methyl chloroform (1,1,1-Trichloroethane)
78933	Methyl ethyl ketone (2-Butanone)
60344	Methyl hydrazine
74884	Methyl iodide (Iodomethane)
108101	Methyl isobutyl ketone (Hexone)
624839	Methyl isocyanate
80626	Methyl methacrylate
1634044	Methyl tert butyl ether

CAS No.	Chemical name
101144	4,4-Methylene bis(2-chloroaniline)
75092	Methylene chloride (Dichloromethane)
101688	Methylene diphenyl diisocyanate (MDI)
101779	4,4'-Methylenedianiline
91203	Naphthalene
98953	Nitrobenzene
92933	4-Nitrobiphenyl
100027	4-Nitrophenol
79469	2-Nitropropane
684935	N-Nitroso-N-methylurea
62759	N-Nitrosodimethylamine
59892	N-Nitrosomorpholine
56382	Parathion
82688	Pentachloronitrobenzene (Quintobenzene)
87865	Pentachlorophenol
108952	Phenol
106503	p-Phenylenediamine
75445	Phosgene
7803512	Phosphine
7723140	Phosphorus
85449	Phthalic anhydride
1336363	Polychlorinated biphenyls (Aroclors)
1120714	1,3-Propane sultone
57578	beta-Propiolactone
123386	Propionaldehyde
114261	Propoxur (Baygon)
78875	Propylene dichloride (1,2-Dichloropropane)
75569	Propylene oxide
75558	1,2-Propylenimine(2-Methyl aziridine)
91225	Quinoline
106514	Quinone
100425	Styrene
96093	Styrene oxide
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin
79345	1,1,2,2-Tetrachloroethane
127184	Tetrachloroethylene (Perchloroethylene)
7550450	Titanium tetrachloride
108883	Toluene
95807	2,4-Toluene diamine
584849	2,4-Toluene diisocyanate
95534	o-Toluidine
8001352	Toxaphene (chlorinated camphene)
120821	1,2,4-Trichlorobenzene
79005	1,1,2-Trichloroethane
79016	Trichloroethylene
95954	2,4,5-Trichlorophenol
88062	2,4,6-Trichlorophenol
121448	Triethylamine
1582098	Trifluralin
540841	2,2,4-Trimethylpentane
108054	Vinyl acetate
593602	Vinyl bromide
75014	Vinyl chloride
75354	Vinylidene chloride (1,1-Dichloroethylene)
1330207	Xylenes (isomers and mixture)
95476	o-Xylenes
108383	m-Xylenes

CAS No.	Chemical name
106423	p-Xylenes
0	Antimony Compounds
0	Arsenic Compounds (inorganic including arsine)
0	Beryllium Compounds
0	Cadmium Compounds
0	Chromium Compounds
0	Cobalt Compounds
0	Coke Oven Emissions
0	Cyanide Compounds[1]
0	Glycol ethers[2]
0	Lead Compounds
0	Manganese Compounds
0	Mercury Compounds
0	Fine mineral fibers[3]
0	Nickel Compounds
0	Polycylic Organic Matter[4]
0	Radionuclides (including radon)[5]
0	Selenium Compounds

For all listings above which contain the word "compounds" and for glycol ethers, unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical as part of that chemical's infrastructure.

[1] X'CN where X = H' or any other group where a formal dissociation may occur. For example KCN or $Ca(CN)_2$.

[2] Includes mono- and di- ethers of ethylene glycol, diethylene glycol and triethylene glycol $R(OCH_2CH_2)_n$-OR' where:

n = 1, 2 or 3

R = alkyl or aryl groups

R' = R, H or groups which, when removed, yield glycol ethers with the structure: $R(OCH_2CH)_n$-OH. Polymers are excluded from the glycol category.

[3] Includes mineral fiber emissions from facilities manufacturing or processing glass, rock or slag fibers or other mineral derived fibers of average diameter one (1) micrometer or less.

[4] Includes organic compounds with more than one (1) benzene ring and which have a boiling point greater than or equal to 100°C.

[5] A type of atom which spontaneously undergoes radioactive decay.

Application for Minor Permit Revision to Panda Gila River (PGR) Gila River Power Station Title V Operating Permit No. V99-018

1.0 Project Description

This notification of minor modification application is submitted pursuant to Rule 210 Section 301 of the Maricopa County Air Pollution Control Regulations. This submittal constitutes an application by PGR for a minor permit revision to the existing Title V Operating Permit for the PGR Gila River Power Station, located in Maricopa County, Arizona.

The purpose of this minor permit modification application is to correct information submitted with the initial permit application regarding emission rates during startup operation for each of the eight (8) combined cycle combustion turbines. This information was used to develop the facility's construction and operating permit. This minor permit modification application seeks to correct the Nitrogen Oxides (NOx) and Carbon Monoxide (CO) startup emission limits based upon actual continuous emissions monitoring system (CEMS) data recorded during startup, testing, and commissioning of the units. This application does not seek to modify any emission limits that are required by applicable federal rules or the Clean Air Act. No adjustment or modifications are being sought for the NOx annual emission rate. The requested increase to the CO annual emission rate is below the 100 ton "significance level" for CO.

The initial emission estimates used to develop the startup permit limits for NOx and CO were based on outdated manufacturer data. More recent manufacturer data and actual CEMS data indicate that NOx emissions can range from 0 to 230 lb/hour until the combustion turbine reached the dry low NOx burner stage defined as "mode 6". At this stage the NOx emissions drop to approximately 50 lb/hour for the remainder of the startup time. The more recent manufacturer data and actual CEMS data also indicate that CO emissions can range from 0 to 100 lb/hour.

A summary of the potential emissions estimates used to develop the initial permit startup NOx emission limits and the requested emission limits is included in Appendix A as Table A-1. A summary of the potential emissions estimates used to develop the initial permit startup CO emission limits and the requested emission limits is included in Appendix A as Table A-2. Table A-1 shows that the requested startup permit limits do not increase annual potential emissions above the current annual permit limits for NOx. Table A-2 shows that the requested increase to the CO annual emission rate is below the 100 ton "significance level" for CO.

To ensure we are meeting the requested permit limits for startup, we are currently implementing or investigating several procedures to achieve a more efficient startup and reduce startup emissions. These include decreasing the time duration for the system to reach "mode 6", bringing the Selective Catalyst Reduction (SCR) system online earlier during startup, and other combustion turbine optimization procedures. We are working with the manufacturer to investigate additional procedures to reduce startup emissions.

The combustion turbine is required to follow a certain ramp rate to allow the Heat Recovery Steam Generator to properly heat up in a manner that minimizes structural stress on the system. Based on the plant's CEMS and updated manufacturer data and to limit system stress, we are requesting that the NOx startup limit be revised from 120 lb/hr to 230 lb/hr and the CO startup limit be increased from 42.4 to 100 lb/hr. The annual NOx limits will not increase because startup emissions are mitigated by implementing new startup procedures and accounting for a smaller installed duct burner size compared to what is permitted (240 MMBtu/hour versus 370 MMBtu/hr). The annual CO limits will remain below the 100 ton "significance level."

2.0 Description of Products

The sole product of this facility is electric power.

3.0 Alternative Operating Scenarios

We are proposing no alternative operating scenarios.

4.0 Alternative Operating Scenarios Products

We are proposing no alternative operating scenarios

5.0 Flow Diagrams

Figure 1 presents a flow diagram of the combined cycle system at the facility.

6.0 Material Balances

There are no material balance changes resulting from this minor permit modification.

7.0 Emissions Related Information

Appendix A contains tables summarizing relevant emissions related information.

8.0 Applicable Requirements

No new applicable requirements are imposed by this minor permit modification. An evaluation of the relevant applicable requirements follows.

8.1 *Maricopa County Rule 240 - Permit Requirements*

Maricopa County Rule 240 provides procedures for the review of new major sources and major modifications to existing sources of air pollution requiring permits or permit modifications. The requested changes to the startup emissions are not a physical modification to the units, nor are they a change in the method of operation of the units. Therefore, these permit revisions are not a modification as

defined in Rule 100 and 240. In addition, there are no proposed revisions to the allowable annual emissions above the PSD significance level.

8.2 *New Source Performance Standards (40 CFR 60)*

Maricopa County has incorporated 40 CFR 60, New Source Performance Standards (NSPS) into Maricopa County Rule 360 and has been delegated authority to implement the NSPS program. Analogous to Rule 240 requirements, a physical or operational change must occur at an emission unit to potentially trigger NSPS applicability. The requested changes to the startup emissions are not a physical modification to the units, nor are they a change in the method of operation of the units. Therefore, these permit revisions are not a modification with respect to NSPS.

8.3 *Acid Rain Requirements (40 CFR 72 - 75)*

Maricopa County has incorporated 40 CFR 72 - 75, Federal Acid Rain regulations into Maricopa County Rule 371. The requested changes to the startup emissions are not a physical modification to the units, nor are they a change in the method of operation of the units. Therefore, these permit revisions are not a modification with respect to Acid Rain requirements.

8.4 Maricopa County Rule 210 – Title V Permit Provisions

Maricopa County Rule 210 outlines procedures for review and approval of Title V permit modifications. There are four categories of Title V permit modifications: notifications (i.e., source changes allowed without permit revisions), administrative revisions, minor revisions, and significant revisions. The notification procedure cannot be used for permit changes that result in exceeding a permit limit, therefore this procedure cannot be used with this request. The proposed permit changes do not qualify for the administrative revision procedures since it is not one of the changes listed under Rule 210, Section 404.1. The proposed permit changes do meet the criteria for processing under the minor revision procedures. The following is a list of the requirements for minor permit revisions identified in Rule 210, Section 405.1 and a demonstration of how the proposed permit changes meet all criteria.

a. **Do not violate any requirement** – The proposed permit revisions do not violate any applicable requirement. The revisions only correct the startup NOx and CO emission limits.
b. **Do not involve substantive changes to existing monitoring, reporting, or recordkeeping requirements in the permit** – The proposed revisions do not substantively change any monitoring, reporting or recordkeeping requirements in the permit.
c. **Do not require or change: (1) A case-by-case determination of an emission limitation or other standard, (2) A source specific determination of ambient impacts, or (3) A visibility or increment analysis.** – The NOx and CO short-term startup limits did not require a case-by-case determination.

The proposed startup emission limits are lower than the maximum short-term emission rates that were previously used in the modeling analysis. The modeling analysis discussed in the Air Quality Impact Analysis section of the application demonstrated compliance with the increments and standards. These emission limit corrections will not require a revised modeling analysis.

d. **Do not seek to establish nor to change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject.** –The proposed emission limits were not assumed in order to avoid an applicable requirement.
e. **Are not modifications under any provision of Title I of the Act or regulations promulgated under A.R.S. §49-480.04.** – The proposed permit revisions are not associated with a physical modification to the units, nor are they a change in the method of operation of the units. Therefore, the permit revisions are not a modification.
f. **Are not changes in fuels not represented in the permit application or provided for in the permit.** – The proposed revisions are not fuel changes.
g. **The increase in the source's potential to emit for any regulated air pollutant is not significant as defined in Rule 100 of these rules.** – The proposed revisions do not increase the annual potential-to-emit emissions for NOx and the increase is below the significance level for CO.
h. **Are not required to be processed as a significant permit revision under Section 406 of this rule.** –The proposed permit revisions do not constitute a modification or reconstruction of a major source of federally listed hazardous air pollutants, nor are they a modification subject to Arizona Revised Statute 49-480 rules.

9.0 Proposed Exemptions

No exemptions from existing applicable requirements are proposed as a result of the requested revisions.

10.0 Process Rate Information

There is no change to any process rate information as a result of the requested revisions.

11.0 Process and Control Equipment

No new process or control equipment is associated with the permit revisions.

12.0 Stack Information

There are no changes to the stack information associated with the permit revisions.

13.0 Site Diagram

There are no changes to the site diagram associated with the permit revisions.

14.0 Air Pollution Control Information

There are no changes to the air pollution control information associated with the permit revisions.

15.0 Supplementary Equipment Information

No changes.

16.0 Compliance Plan

The applicable requirements related to this permit revision are listed in Section 8 of this application and in the current GRPS Title V Permit. GRPS is in compliance with and will continue to comply with all requirements listed in Section 8 of this application and with the existing Title V Permit as revised.

17.0 Compliance Certification

Certification of Compliance

I, John T. Duff, As Responsible Official and Designated Representative for the Gila River Power Station (GRPS), hereby certify that:

1. The applicable requirements for GRPS that are the basis for this certification are set forth in Section 8 of this application and in the Title V Permit.

2. The methods used for determining compliance with applicable requirements are described in the Title V permit.

3. GRPS will submit annual compliance certifications during the permit term, postmarked within 90 days of each anniversary of permit issuance.

4. GRPS is in compliance with the monitoring requirements identified in the Title V permit.

5. Based on information and belief formed after reasonable inquiry, the statements and information in the attached documents are true, accurate, and complete.

John T. Duff
Vice President

01/10/04
Date

18.0 New Major Source Requirements

As discussed in Section 8, the permit revisions are exempt from Maricopa County Rule 240 requirements.

19.0 Calculations

Calculations are included in Appendix A.

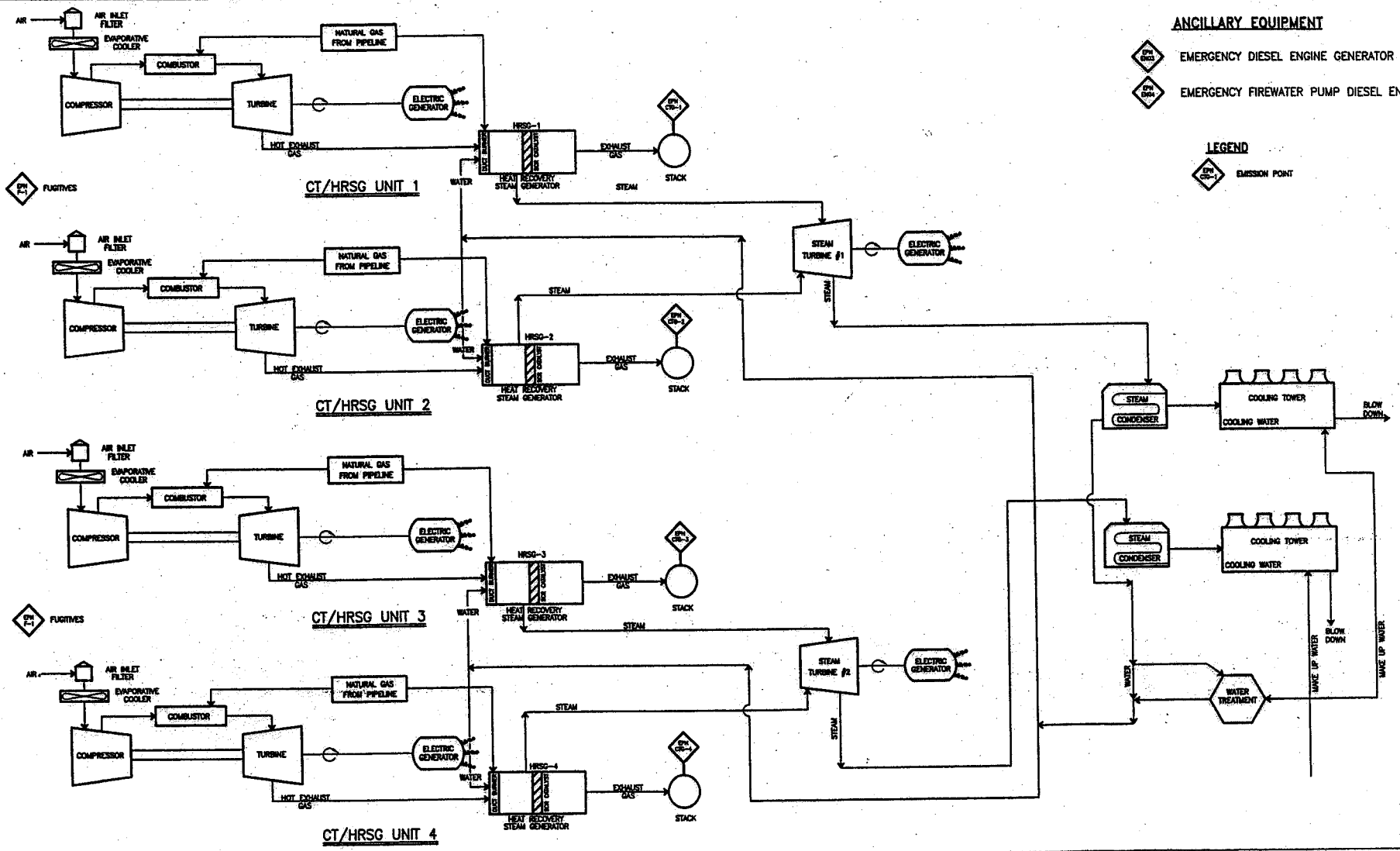


FIGURE 1

PROCESS FLOW DIAGRAM FOR GE PG7241 (FA) COMBUSTION TURBINES
POWER BLOCK No. 1 AND 2

Source: ECT, 2001.

ECT
Environmental Consulting & Technology, Inc.

Appendix A

Emission Calculations

Table A-1
NOx Startup/Shutdown (SU/SD) Emissions Estimate (each of 8 CT's)

GILA RIVER POWER STATION

NOx Initial Startup/Shutdown (SU/SD) Emissions Estimate (each of 8 CT's)

SCR Control Efficiency during normal operation:	75%	
Turbine Normal Operation for 8160 hours/year	60 lb/hr	61.2 tons/year
Turbine Startup Emissions for 600 hours/yr	120 lb/hr	36.0 tons/year
Duct Burner (370 MMBtu/hr) for 50% capacity factor	29.5 lb/hr	16.2 tons/year
Annual Emissions per CT		113.4 tons/year
Annual Emissions for 8 CT's		907.2 tons/year

NOx Revised Startup/Shutdown (SU/SD) Emissions Estimate (each of 8 CT's)

SCR Control Efficiency during normal operation:	75.0%	
Turbine Normal Operation for 8160 hours/year	60 lb/hr	61.2 tons/year
Turbine Startup Emissions for 600 hours/yr		
Phase1 SU (prior to Mode 6) (~1 hour)	230 lb/hr	28.8 tons/year
Phase 2 SU (~2 hours)	50 lb/hr	8.8 tons/year
Duct Burner (240 MMBtu/hr) for 50% capacity factor	19.1 lb/hr	10.5 tons/year
Annual Emissions per CT		109.2 tons/year
Annual Emissions for 8 CT's		873.6 tons/year

Table A-2
CO Startup/Shutdown (SU/SD) Emissions Estimate (each of 8 CT's)

GILA RIVER POWER STATION

CO Initial Startup/Shutdown (SU/SD) Emissions Estimate (each of 8 CT's)

Oxidation Catalyst Control Efficiency during normal operation:	80%	
Turbine Normal Operation for 8160 hours/year	32 lb/hr	26.1 tons/year
Turbine Startup Emissions for 600 hours/yr (uncontrolled)	212 lb/hr	
Turbine Startup Emissions for 600 hours/yr (controlled)	42.4 lb/hr	12.7 tons/year
Duct Burner (370 MMBtu/hr) for 50% capacity factor	36.9 lb/hr	16.2 tons/year
Annual Emissions per CT		55.0 tons/year
Annual Emissions for 8 CT's		440 tons/year

CO Revised Startup/Shutdown (SU/SD) Emissions Estimate (each of 8 CT's)

Oxidation Catalyst Control Efficiency during normal operation:	80%	
Turbine Normal Operation for 8160 hours/year	32 lb/hr	26.1 tons/year
Turbine Startup Emissions for 600 hours/yr (uncontrolled)	500 lb/hr	
Turbine Startup Emissions for 600 hours/yr (controlled)	100 lb/hr	30.0 tons/year
Duct Burner (240 MMBtu/hr) for 50% capacity factor	23.9 lb/hr	10.5 tons/year
Annual Emissions per CT		66.6 tons/year
Annual Emissions for 8 CT's		532.8 tons/year
Potential To Emit Increase		92.8 tons/year

GILA RIVER

HAND DELIVERED

February 9, 2004

Mr. Robert Evans
Maricopa County Environmental Services Department
Air Quality Division
1001 N. Central Ave.
Phoenix, AZ 85004

Re: Gila River Power Station
Permit No. V99-018
Non-Minor Permit Revision

Dear Mr. Evans:

On behalf of Panda Gila River, L.P. (PGR), we are submitting the attached application for a Non-Minor Permit Revision to the existing Title V Operating Permit at Gila River Power Station. This application is being submitted as required by the Order of Abatement by Consent dated February 6, 2004.

This application for a Non-Minor Permit Revision is submitted pursuant to Rule 210 Sections 301 and 406 of the Maricopa County Air Pollution Control Regulations. This submittal constitutes a Significant Permit Revision to the existing Title V Operating Permit for the Gila River Power Station, located in Maricopa County, Arizona.

The purpose of this submittal is to update calculations submitted with the original application and the recent minor modification dated January 12, 2004. The updated calculations reflect expected emission rates during startup operation for each of the eight (8) combined cycle combustion turbines and the use of smaller design heat release duct burners. Section 1.0 of the application package includes the requested changes to the current permitted emission limits. Revised emission rate calculations are included in Attachment B of the application package. This non-minor permit revision application seeks to correct the Nitrogen Oxides (NOx) and Carbon Monoxide (CO) startup emission limits based upon actual continuous emissions monitoring system (CEMS) data recorded during startup, testing, and commissioning of the units.

Post Office Box 798, Gila Bend, Arizona 85337
PHONE 928/ 683-0020 FAX 928/ 683-0028

EXHIBIT 2

Panda Gila River, L.P. (PGR), would also like to request an expedited review of this permit modification, and that Maricopa County Environmental Services Department ("MCESD") schedule a public hearing during the 30-day public comment period. Also, that MCESD will request EPA to conduct its review concurrent with the 30-day public review period.

Please call Paul Carpinone at (813) 228-4858, Byron Burrows at (813) 228-1282, or myself at (813) 228-1381 if you have any questions.

Based on information and belief formed after reasonable inquiry, the statements and information in the attached documents are true, accurate, and complete.

Sincerely,
Panda Gila River, L.P.
a Delaware Limited Partnership

By:_____
Name: John T. Duff
Title: Vice President

cc: Emmanuelle Rapicavoli, EPA
Phil Fargotstein, Fennemore Craig
Dan Baerman, TPS Arizona Operations Co.

Attachments

bcc: David Farabee, Pillsbury Winthrop
Vince Crane, PGR
Greg Nelson, TEC

File GRPS OP.E1.1.2

GILA RIVER POWER STATION

NON-MINOR PERMIT REVISION APPLICATION

Prepared for:

GILA RIVER POWER STATION

Gila Bend, Arizona

Prepared by:

ECT

Environmental Consulting & Technology, Inc.
3701 Northwest 98th Street
Gainesville, Florida 32606

ECT No. 040138-0100

February 2004

INTRODUCTION

Panda Gila River, L.P. (PGR) has recently constructed and placed in operation a nominal 2,300 megawatt (MW) combined-cycle, natural gas-fired power plant located in Gila Bend, Maricopa County, Arizona. The Gila River Power Station (GRPS) is comprised of eight General Electric (GE) 7FA combustion turbines, eight heat-recovery steam generators (HRSGs), and four single-flow, axial exhaust condensing steam turbines. GRPS combined-cycle unit air pollution control systems include oxidation catalyst for control of carbon monoxide (CO) and volatile organic compounds (VOC) emissions, and selective catalytic reduction (SCR) for control of nitrogen oxides (NO_x) emissions.

Construction and operation of the GRPS is authorized by Maricopa County Environmental Services Department (MCESD) Permit Number V99-018. Permit Number V99-018 was initially issued on February 9, 2001 and subsequently revised on August 20, 2001. Permit Number V99-018 implements the requirements of both the Prevention of Significant Deterioration (PSD) and Title V Operation Permit regulatory programs.

Permit Number V99-018 includes hourly emission limits for each GRPS combustion turbine that are applicable during startup mode; reference Table 3. These startup emission limits were based on estimated emission rates contained in the initial permit application submitted to MCESD in April 2000. Actual emissions data obtained from the GRPS combustion turbine continuous emissions monitoring systems (CEMS) during startup mode indicate that the original startup emission estimates were incorrect.

The original GRPS project scope, as described in the April 2000 permit application, included natural gas-fired duct burners for each HRSG unit. Each duct burner was premised to have a design heat input capacity of 370 million British thermal units per hour on a higher heating value basis (mmBtu/hr, HHV). Due to project design revisions, the design capacity of the duct burners has been reduced to 282 mmBtu/hr, HHV.

Accordingly, the purpose of this non-minor permit revision application is to request the following revisions to Permit Number V99-018:

- Revisions to Table 3 startup emission limits for NO_x and CO; and
- Revisions to Table 1, Table 2, and Table 4 emission limits to reflect the smaller design heat input capacity duct burners.

The requested maximum hourly NO_x and CO startup emission rates are consistent with MCESD permit limits for similar natural gas-fired combined cycle electric generating units. In addition, the requested revisions in maximum hourly NO_x and CO startup emission rates do not alter the prior BACT determinations made by MCESD for the GRPS. The GRPS combined-cycle combustion units are fired exclusively with natural gas and equipped with oxidation catalyst and SCR control technologies.

Table 1 of GRPS Permit Number V99-018 currently includes rolling 12-month annual NO_x and CO emission rates for each GRPS combined-cycle unit, including startups. As discussed in Section 1.0 of this application, decreases in the Table 1 annual emission limits are requested for all pollutants, with the exception of CO, due to a re-evaluation of annual emission rates and the reduction in duct burner design heat input capacity. The potential increase in annual CO emissions (i.e., 82.5 tpy) is below the PSD significant emission rate threshold of 100 tpy for major modifications. PGR will operate the GRPS combined-cycle units such that emissions from the units, including startups, do not exceed the revised Table 1 limits.

Following this introduction, a detailed discussion of each requested permit revision is provided in Section 1.0. Applicable sections of the MCESD *Application for Non-Minor Permit Revision* form are provided in Attachment A. Supporting emission rate calculations are provided in Attachment B.

1.0 REQUESTED PERMIT REVISIONS

1.1 STARTUP EMISSIONS

The GE 7FA combustion turbines installed at the GRPS are current technology, state-of-the-art units equipped with advanced combustion systems that are designed to minimize emissions of NO_x, CO, and VOC. However, the low emission rates that are attained under steady-state operation cannot be achieved during startups due to the combustion characteristics of dry low-NO_x (DLN) combustor technology. During startups, combustion zone conditions will not be optimal resulting in varying and higher emission rates until steady-state combustion is achieved.

The initial April 2000 permit application estimated maximum hourly NO_x and CO uncontrolled startup emission rates of 120 and 212 pounds per hour (lb/hr), respectively. The GRPS combined-cycle units are equipped with oxidation catalyst and SCR control systems. The April 2000 permit application further assumed that the SCR control system would not be available during startups due to temperature constraints. With respect to the oxidation catalyst control system, the permit application conservatively assumed the oxidation catalyst would be functional throughout the startup cycle with a CO oxidation efficiency of 80 percent. Based on these permit application representations, Table 3 of GRPS Permit Number V99-018 contains NO_x and CO startup emission limits of 120 and 42.4 lb/hr, respectively. The CO startup emission limit was derived from the maximum hourly uncontrolled emission rate of 212 lb/hr and the premise of an 80 percent efficient oxidation catalyst control system.

Actual data obtained from the GRPS combined-cycle unit NO_x and CO CEMS during startups indicate that the initial April 2000 estimates are unachievable. The CO CEMS startup data indicates that a controlled maximum hourly emission rate of 100 lb/hr is attainable during a typical four-hour duration cold startup. This maximum controlled hourly emission rate reflects the performance of the oxidation catalyst control system during the startup cycle. Similarly, the NO_x CEMS startup data indicates that an uncontrolled maximum hourly emission rate of 230 lb/hr is attainable during a typical

four-hour duration cold startup. Because the SCR catalyst is not functional until the exhaust gas temperature reaches approximately 525° F, SCR control technology cannot be utilized to reduce maximum hourly startup emissions.

In summary, PGR requests the following revisions to Table 1 of Permit Number V99-018:

- Increase the combustion turbine maximum hourly NO_x emission rate during startups from 120 lb/hr to 230 lb/hr; and
- Increase the combustion turbine maximum hourly CO emission rate during startups from 42.4 lb/hr to 100 lb/hr.

The requested maximum hourly NO_x and CO emission rates are consistent with MCESD permit limits for similar natural gas-fired combined cycle electric generating units. In addition, the requested revisions in maximum hourly NO_x and CO startup emission rates do not alter the prior BACT determinations made by MCESD for the GRPS. The GRPS combined-cycle combustion units are fired exclusively with natural gas and equipped with oxidation catalyst and SCR control technologies. SCR control technology is currently considered NO_x BACT for natural gas-fired combined-cycle combustion turbines throughout the United States. Except for CO nonattainment areas (which requires the use of more stringent Lowest Achievable Emission Rate [LAER] technology), required CO control technology for natural gas-fired combined-cycle combustion turbines is typically the use of good combustion practice due to the already low uncontrolled CO emission rates. Although located in a CO attainment area, the GRPS combined-cycle units are equipped oxidation catalyst control technology; a control technology typically considered to represent LAER. It is also noted that the original GRPS permit application included a dispersion model analysis that demonstrated insignificant CO air quality impacts using uncontrolled CO startup emission rates; i.e., 212 lb/hr/CT.

Table 1 of GRPS Permit Number V99-018 currently includes rolling 12-month annual NO_x and CO emission rates for each GRPS combined-cycle unit, including startups. As

discussed below, decreases in the Table 1 annual emission limits are requested for all pollutants, with the exception of CO, due to a re-evaluation of annual emission rates and the reduction in duct burner design heat input capacity. PGR will operate the GRPS combined-cycle units such that emissions from the units, including startups, do not exceed the revised Table 1 limits.

1.2 DUCT BURNER EMISSIONS

The original GRPS project scope, as described in the April 2000 permit application, included natural gas-fired duct burners for each HRSG unit. Each duct burner was premised to have a design heat input capacity of 370 million British thermal units per hour on a higher heating value basis (mmBtu/hr, HHV). Due to project design revisions, the design heat input capacity of the duct burners has been reduced to 282 mmBtu/hr, HHV.

Uncontrolled duct burner emission rates, in units of lb/mmBtu, were included in the April 2000 permit application. These uncontrolled emission rates have been revised to reflect the emissions performance of the smaller design capacity duct burners based on vendor data. In addition, a review of the original April 2000 duct burner emission rate calculations indicate that SCR controlled NO_x emission rates were under-estimated; i.e., the SCR controlled combustion turbine (CT) plus duct burner (DB) NO_x emission rate should have been 24.8 lb/hr instead of 22.9 lb/hr. However, PGR is not requesting an increase in the current maximum hourly NO_x emission limitation of 22.9 lb/hr and will operate the SCR control system to achieve this permit limit. Due to the lower design heat input capacity and emission factors of the installed duct burners, maximum mass emission rates (in units of lb/hr) will be lower than the original, higher design heat input capacity duct burners. Detailed emission rate calculations for the GRPS installed duct burners are provided in Attachment B.

The original April 2000 annual emission rate calculations premised 600 hours per year of startups (based on 50 cold starts and 200 warm starts per year) with the balance of the year (8,160 hours per year) at normal full load operation. This is a very conservative, and

unrealistic, premise in that it assumes the combustion turbines frequently startup without ever shutting down. A cold start is defined as a startup that occurs after a combustion turbine has been shutdown for 72 hours or more prior to startup. A warm start is defined as a startup that occurs after a combustion turbine has been shutdown for greater than 8 hours and less than 72 hours prior to startup. The April 2000 emission rate calculations ignored the combustion turbine downtime that must precede each startup. Accordingly, the annual emission rates were revised to include consideration of the combustion turbine downtime that precedes each startup and also address emissions occurring during hot starts. The revised annual emission rate calculations are provided on Table B-2 in Attachment B.

Due to the lower mass emission rates for the GRPS duct burners and re-evaluation of annual emission rates, the following revisions to Permit Number V99-018 are requested:

A. Table 1 Revisions

Each CT/DB Unit	Rolling 12-Month Emission Limits (tons/year)				
	SO_2	NO_x	CO	PM_{10}	VOC
From	12.0	113.4	55.0	48.1	26.3
To	11.6	107.5	55.3	47.8	18.0

B. Table 2 Revisions

Each CT/DB Unit	Hourly Emission Limits (lb/hr)				
	SO_2	NO_x	CO	PM_{10}	VOC
From	3.0	22.9	14.0	12.5	7.3
To	2.8	No change	9.4	12.3	4.1

C. Table 4 Revisions

Each CT/DB Unit	Hourly Emission Limits (lb/hr)				
	SO_2	NO_x	CO	PM_{10}	VOC
From	3.0	No change	No change	12.5	No change
To	2.8	N/A	N/A	12.3	N/A

In addition to the Table 4 revisions shown above, a decrease in the Table 4 maximum hourly PM_{10} emission rate for each turbine and duct burner unit from 0.0086 lb/mmBtu to 0.0085 lb/mmBtu is requested.

Similar to the prior discussion concerning combustion turbine startup emissions, the decrease in design heat capacity of the duct burners does not alter the prior BACT determinations made by MCESD for the GRPS. The GRPS combined-cycle combustion units are fired exclusively with natural gas and equipped with oxidation catalyst and SCR control technologies. These control technologies continue to represent BACT for natural gas-fired combined cycle units equipped with supplemental duct burners. In fact, the uncontrolled (i.e., prior to treatment by the oxidation catalyst and SCR control systems) GRPS duct burner emission rates, in units of lb/mmBtu, are comparable to recent controlled BACT duct burner emission rates based on a review of data from EPA's RACT/BACT/LAER Clearinghouse (RBLC) database.

2.0 REGULATORY APPLICABILITY

2.1 TITLE V PERMITTING PROGRAM

The requested changes to combustion turbine startup emission limits and to the emission limits associated with the smaller duct burners are being submitted pursuant to MCESD Air Pollution Control Regulation Rule 210, Section 406, *Significant Permit Revisions.* Accordingly, this permit application constitutes PGR's request for a non-minor permit revision.

2.2 PSD PERMITTING PROGRAM

A modification to an existing PSD permitted source, such as the GRPS, will be subject to PSD review as a *major modification* if the potential emission rate increases resulting from the modification exceed the PSD significant emission rate (SER) thresholds. The PSD SERs for NO_x and CO are 40 and 100 tons per year, respectively.

For each regulated pollutant, the net emission increase for a modification project is equal to the sum of the increases in emissions associated with the proposed project plus all facility-wide creditable, contemporaneous emission increases minus all facility-wide creditable, contemporaneous emission decreases. If this net emissions increase is equal to or greater than the applicable PSD SERS, then the net emission increase is considered to be "significant" and the modification will be subject to PSD New Source Review (NSR) for that particular regulated pollutant.

The change in duct burner heat input capacity represents a revision to the original project scope rather than a replacement of existing equipment. As advised by MCESD, the reduction in potential emission rates due to the installation of smaller size duct burners than currently permitted would not be creditable for netting purposes; i.e., emission reductions are not creditable for an emissions unit that was never constructed or operated. The installed, smaller duct burners remain subject to PSD review as a component of the GRPS project. Because the smaller size duct burners result in a decrease in potential emission rates, the original air quality impact analysis remains applicable; i.e., the initial

dispersion modeling analysis would be expected to over-estimate maximum air quality impacts. As previously discussed in Section 1.0, the initial BACT analysis for the GRPS combined-cycle units, including the duct burners, is also considered to remain applicable to the smaller size duct burners. The GRPS combined-cycle combustion units are fired exclusively with natural gas and equipped with oxidation catalyst and SCR control technologies. These control technologies continue to represent BACT for natural gas-fired combined cycle units equipped with supplemental duct burners.

The requested revisions to the GRPS startup emission rates and the re-evaluation of annual emissions rates (to include consideration of combustion turbine downtime prior to startups) result in decreases in current permitted annual emission rates with the exception of CO. The potential increase in annual CO emissions (i.e., 82.5 tpy) is below the PSD significant emission rate threshold of 100 tpy for major modifications. Details of the annual emission rate calculations are provided on Attachment B (Table B-3) to this application. In addition, the requested revisions in startup emission rates represent a correction to the original permit application emission estimates rather than a physical change or change in a method of operation. Accordingly, the requested revisions to the combustion turbine NO_x and CO startup emission rates are considered to constitute a *minor modification* to the existing GRPS and therefore not subject to further PSD review. However, as previously discussed in Section 1.0 of this application, the requested revisions in maximum hourly NO_x and CO startup emission rates do not alter the prior BACT determinations made by MCESD for the GRPS. The GRPS combined-cycle combustion units are fired exclusively with natural gas and are equipped with oxidation catalyst and SCR control technologies.

ATTACHMENT A

APPLICATION FOR NON-MINOR
PERMIT REVISION

MARICOPA COUNTY
ENVIRONMENTAL SERVICES DEPARTMENT
AIR QUALITY DIVISION
1001 North Central Avenue
Phoenix, Arizona 85004
(602) 506-6094, FAX (602) 506-6985, TTY (602) 506-6704
http://www.maricopa.gov/sbcap

FOR OFFICIAL USE ONLY
DATE RECEIVED

APP NO.

APPLICATION FOR NON-MINOR PERMIT REVISION

(As required by Maricopa County Air Pollution Control Regulations, Rule 220)

READ INSTRUCTIONS FIRST. ALL APPLICANTS MUST COMPLETE ITEMS 1 THROUGH 17, ALSO COMPLETE EACH APPLICABLE SECTION A THROUGH Z.

1. BUSINESS NAME: Panda Gila River, L.P

2. ADDRESS OF SITE: 1250 East Watermelon Road
Gila Bend AZ ZIP CODE: 85337

3. TELEPHONE AT SITE: (928) 683-0110

DO NOT WRITE IN THIS SPACE
AIRS NUMBERS
COMPLIANCE _ _ _ _ _
EMISSION _ _ _ _ _

4. TYPE OF OWNERSHIP: [x] Corporation [x] Partnership [ ] Sole Owner [ ] Government [ ] Other - - Specify:

5. NAME AND MAILING ADDRESS OF OWNERSHIP: Panda Gila River, L.P.
P.O. Box 111, Tampa, FL 33601

6. TELEPHONE OF OWNERSHIP: (813) 228-4858

7. SEND ALL CORRESPONDENCE INCLUDING INVOICE AND PERMIT TO:
COMPANY NAME: Panda Gila River, L.P.
ADDRESS: P.O. Box 111
CITY: Tampa STATE: FL ZIP CODE: 33601
ATTN: Paul Carpinone, P.E.

8. SIC(STANDARD INDUSTRIAL CLASSIFICATION) CODE(S): 4911

9. EXISTING AIR QUALITY PERMIT NUMBER FOR THIS SITE: V99-018

10. BRIEF DESCRIPTION OF BUSINESS/PROCESS AT SITE: Natural gas-fired combined cycle combustion turbine electric generation facility.

11. OPERATING SCHEDULE 24 HOURS PER DAY 7 DAYS PER WEEK 52 WEEKS PER YEAR

12. PROJECTED DATE OF COMPLETION: Not applicable

13. THE AUTHORIZED CONTACT PERSON REGARDING THIS APPLICATION IS:

NAME Paul L. Carpinone, P.E. TELEPHONE: (813) 228-4858

TITLE General Manager, Compliance & Services FAX: (813) 228-1308

COMPANY Panda Gila River E-MAIL: plcarpinone@tecoenergy.com

14. I CERTIFY THAT I AM FAMILIAR WITH THE OPERATIONS AND EQUIPMENT REPRESENTED ON THIS APPLICATION AND ATTACHMENTS AND THE INFORMATION PROVIDED HEREIN IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DATE 02/09/2004 SIGNATURE OF OWNER OR RESPONSIBLE OFFICIAL OF BUSINESS

TYPE OR PRINT NAME AND TITLE John T. Duff, Vice President

SECTION A. FUEL BURNING EQUIPMENT

Complete this section if you burn natural gas, propane, butane, fuel oils, diesel, kerosene, gasoline, fuel oil blended with used oil, coal, charcoal, wood, or any other fossil fuel. Provide complete specifications for non-commercial and special fuels. Describe equipment such as boilers, furnaces, space heaters, water heaters, dryers, pool and spa heaters, kilns, ovens, burners, stoves, steam cleaners, hot water pressure washers, etc, with an input rating of 300,000 Btu/hr or more. List on separate lines all equipment with differing input Btu/hour ratings. Do not include vehicles, forklifts, lawnmowers, weedeaters and hand-held equipment operating on fossil fuels. Items such as asphalt kettles, incinerators, crematories, and emission control devices burning fuel are not to be listed in this section but shall be described in Section Y. Internal combustion engines and gas turbines are to be listed in Section B.

FUEL	EQUIPMENT DESCRIPTION. INCLUDE MAKE & MODEL. DESCRIBE AIR POLLUTION ABATEMENT/CONTROLS, IF ANY	DATE OF INSTALLATION	HOW MANY	NUMBER OF HOURS IN OPERATION DAILY	NUMBER OF HOURS IN OPERATION ANNUALLY	GROSS INPUT RATING (EACH) (Btu/hr or MM Btu/hr) MM Btu/hr = 10^6 Btu/hr
	No changes are requested. See original application.					
DO YOU INTEND TO BURN USED OIL, USED OIL FUEL, HAZARDOUS WASTE, OR HAZARDOUS WASTE FUEL?						

SECTION B. INTERNAL COMBUSTION ENGINES & TURBINES

This section applies to stationary and portable fuel-fired equipment such as generators, fire pumps, air conditioning compressor engines, co-generation units, etc. Indicate in the description if the equipment is only for emergency use. Attach engine emission factors or emissions data, and specification sheets from manufacturer. Provide load factor data from manufacturer if applicable. Do not include vehicles, forklifts, lawnmowers, weedeaters and hand-held equipment operating on fossil fuels.

FUEL	EQUIPMENT DESCRIPTION. INCLUDE MAKE & MODEL. DESCRIBE AIR POLLUTION ABATEMENT/CONTROLS, IF ANY	DATE OF INSTALLATION	HOW MANY	NUMBER OF HOURS IN OPERATION DAILY	NUMBER OF HOURS IN OPERATION ANNUALLY	EQUIPMENT RATING (Btu/hr, h.p. or other rating)
	No changes are requested. See original application.					

SECTION C. PETROLEUM STORAGE TANKS

This section applies to storage of gasoline and other fuels which have a true vapor pressure of 1.5 psia (77.6 mm of mercury) or greater under actual loading conditions. Petroleum terminals and bulk plants must use Section Y instead of this section. Storage tanks containing liquids with a vapor pressure less than 1.5 psia (other than fuels, such as non-petroleum organic liquids, caustic solutions, acids, etc.) must use Section Y.

1. DESCRIBE TANKS AND PRODUCTS STORED:

HOW MANY	CAPACITY OF EACH TANK	DATE OF INSTALLATION	ABOVE GROUND OR UNDERGROUND	PRODUCT STORED
	No changes are requested. See original application.			

2. ESTIMATE TOTAL ANNUAL THROUGHPUT FOR EACH PRODUCT STORED IN THESE TANKS (GALLONS/YEAR):

3. RETAIL ☐
   NON-RETAIL ☐

4. EMISSION CONTROLS: STAGE ONE VAPOR RECOVERY: 2-POINT ☐ COAXIAL ☐ Y/WYE ☐ ☐
   STAGE II ☐
   NONE ☐

5. SUBMERGED FILL ☐
   BOTTOM FILL ☐
   OTHER ☐ SPECIFY

6. ARE THERE ANY DEVICES OR PROTRUSIONS IN THE PRODUCT FILL PIPE, SUCH AS THEFT OR OVERFILL PREVENTION DEVICES WHICH IMPAIR OR PREVENT MEASURING THE FILL SLEEVE RELATIVE TO THE BOTTOM OF THE TANK? ☐ YES ☐ NO
   IF YES, DESCRIBE:

SECTION D. WATER & SOIL REMEDIATION

Not Applicable

This section applies to any site where clean-up activities for contaminated soil or water will be conducted.

1. TYPE OF CONTAMINANT: ☐ DIESEL ☐ GASOLINE ☐ OTHER, SPECIFY

2. CONTAMINATED MATERIAL: ☐ SOIL _____ CUBIC YARDS ☐ WATER _____ GAL/MIN
   _____ (specify unit of measure)

4. OTHER AGENCIES NOTIFIED: ☐ CITY OF _____
   ☐ ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

5. BRIEFLY DESCRIBE PROCEDURE:
   (Use separate page if necessary)

6. ESTIMATE INITIAL TOTAL VOC EMISSION RATES: BEFORE CONTROL DEVICE: _____ LB/DAY; _____ LB/HR
   IF POLLUTION CONTROL SYSTEM IS USED, AFTER CONTROL DEVICE: _____ LB/DAY; _____ LB/HR

7. ESTIMATE LENGTH OF TIME FOR COMPLETION OF THIS PROJECT: _____ MONTHS

8. DESCRIBE TYPE, CAPACITY AND EFFICIENCY OF CONTROLS FOR AIR EMISSIONS:
   (Use separate page if necessary)

9. PROVIDE PROJECTED START-UP AND COMPLETION DATES:

10. ATTACH FULL DETAILS OF SCOPE OF WORK, TREATMENT PROCEDURES, SPECIFICATIONS, TEST RESULTS, AND PLAN FOR CLOSURE.

SECTION E-1. SPRAY PAINTING & OTHER SURFACE COATING (NON-VEHICLE).

This section applies to but is not limited to: spray painting, powder coating, dipping, ultrasound coating and roller, brush and wipe applications. In response to items 1 and 2, list all materials used in painting or coating operations, including but not limited to: paints, primers, clear coats, catalysts, thinners, reducers, accelerators, retarders, paint strippers, gun cleaners, cleaning solvents, stains, plastic coatings, adhesives and surface preparation materials. For each material listed, provide manufacturer's technical data sheet or material safety data sheet (MSDS) and number them to correspond to the table below. Use Section E-2 for vehicle spray painting operations.

1. LIST ALL LIQUID MATERIALS:

MSDS NUMBER	NAME/TYPE OF MATERIAL (ATTACH MSDS)	ESTIMATED USAGE (gal/yr)	VOC CONTENT (lb/gal)	GAL/YR RECLAIMED OR SHIPPED AS WASTE	VOC EMISSIONS (lb/yr)
	No changes are requested. See original application.				

2. LIST ALL POWDER COATING MATERIALS:

NAME/TYPE – ATTACH MSDS OR SPECIFICATIONS	ESTIMATED YEARLY USAGE (lb)

3. DESCRIBE SUBSTRATE BEING COATED (such as metal, plastic, etc.): _____

   DESCRIBE PRODUCT BEING COATED (such as computer cabinets, waterbed frames, etc.): _____

4. DESCRIBE THE METHOD OF APPLICATION:
   - a. ☐ Air Atomization
     Operating pressure: _____ (psi)
   - b. ☐ Pressure Atomization (Airless)
   - c. ☐ Combined Air and Airless
   - d. ☐ High Volume Low Pressure (HVLP)
   - e. ☐ Electrostatic
   - f. ☐ Other (specify): _____

5. DESCRIBE FACILITY(IES) FOR APPLYING COATINGS. ATTACH MANUFACTURER'S SPECIFICATIONS.

#	ENCLOSURE OR BOOTH	SIZE (L x W x H)	DATE OF INSTALLATION	EXHAUST FAN C.F.M.	FILTER SYSTEM & EFFICIENCY*
1					
2					

*PROVIDE WRITTEN DOCUMENTATION OF FILTER EFFICIENCY (i.e., manufacturer's data or source test data)

6. WILL ALL SPRAYING OPERATIONS BE CONDUCTED INSIDE A BOOTH OR ENCLOSED BUILDING?:
   IF THE ANSWER IS NO, DESCRIBE THE AREA AND EXPLAIN HOW THE OVERSPRAY WILL BE CONTROLLED:

   _____

7. DESCRIBE ANY RAIN CAP ON THE STACK:

8. ARE ANY COATINGS BAKED, OVEN-CURED OR HEAT-TREATED? WHICH ONES? AT WHAT TEMPERATURE? PROVIDE COMPLETE DESCRIPTION AND SPECIFICATIONS FOR THE OVENS. IF OVENS ARE FUEL-FIRED, BE SURE TO INCLUDE THE OVENS ALSO IN SECTION A.

   _____

9. DESCRIBE CLEAN-UP OF COATING EQUIPMENT AND HOW CLEAN-UP SOLVENT IS DISPOSED OF: (COMPLETE SECTION F, IF APPLICABLE) _____

SECTION F. SOLVENT CLEANING

1. COMPLETE THE TABLE BELOW FOR ALL SOLVENT CLEANING DEVICES USED. ATTACH MANUFACTURER'S EQUIPMENT SPECIFICATIONS/LITERATURE WHENEVER AVAILABLE.

2. ON A SEPARATE ATTACHMENT, PLEASE PROVIDE ANY ADDITIONAL EQUIPMENT STANDARDS AND/OR OPERATING PARAMETERS FOR SOLVENT CLEANING DEVICES UTILIZING ANY OF THE FOLLOWING HALOGENATED SOLVENTS: METHYLENE CHLORIDE, PERCHLOROETHYLENE, TRICHLOROETHYLENE, 1,1,1 – TRICHLOROETHANE, CARBON TETRACHLORIDE AND/OR CHLOROFORM

TYPE OF SOLVENT CLEANING DEVICE [1] (see list below)	HOW MANY	MANUFACTURER / MODEL	DATE OF INSTALLATION	SOLVENT SURFACE DIMENSIONS	FREEBOARD HEIGHT (INCHES)	INTERNAL VOLUME [GALLONS]	NAME OF SOLVENT TO BE USED (Include MSDS)	ANNUAL SOLVENT USAGE [GALLONS]	DISPOSAL QUANTITY [GALLONS]	DISPOSAL METHOD [2]
No changes are requested. See original application.										

NOTES:

[1] SPECIFY THE TYPE OF EQUIPMENT FROM THE FOLLOWING LIST:
1. COLD CLEANER (NO BOILING) WITH REMOTE RESERVOIR
2. COLD CLEANER (NO BOILING) WITHOUT REMOTE RESERVOIR
3. BATCH LOADED VAPOR DEGREASER
4. CONVEYORIZED VAPOR DEGREASER
5. CONVEYORIZED NON-VAPOR DEGREASER
6. OTHER (SPECIFY)

[2] IF WASTE SOLVENT IS REDISTILLED ON SITE, PROVIDE INFORMATION ON THE STILL, INCLUDING MANUFACTURER'S LITERATURE.

SECTION X1. POINT SOURCE EMISSIONS OF HAZARDOUS AIR POLLUTANTS

COMPLETION OF THIS SECTION IS MANDATORY FOR ALL SITES WHICH WILL HAVE AN ACTUAL EMISSION RATE OF 500 POUNDS PER YEAR OR MORE OF ANY SINGLE FEDERAL HAZARDOUS AIR POLLUTANT (HAP) OR ONE (1) TON PER YEAR OR MORE OF ANY COMBINATION OF HAPS.

SOURCE EQUIPMENT NAME (1)	HAP NAME AND/OR CAS NUMBER (2)	HAP EMISSION RATE		STACK OR POINT DISCHARGE PARAMETERS (5)								
						BUILDING DIMENSIONS				STACK EXIT DATA		
		LB/HR (3)	TONS/ YEAR (4)	STACK ID	STACK HEIGHT ABOVE GROUND (feet)	BUILDING LENGTH (feet)	BUILDING WIDTH (feet)	BUILDING HEIGHT (feet)	DISTANCE FROM STACK TO NEAREST PROPERTY LINE (feet)	DIAMETER or LENGTH X WIDTH (ft)	VEL. (fps)	TEMP. (°F)

No changes are requested. See original application.

General Instructions:

(1) Identify each federal hazardous air pollutant (HAP) emission source and each HAP associated with that emission source for the entire plant site. Use as many lines as necessary for each HAP source.

(2) Refer to the list of federal HAPS on the last page of the application.

(3) Pounds per hour (lb/hr) is actual emission rate estimated or measured by applicant to be vented through stack.

(4) Tons per year is actual annual emission rate estimated or measured by applicant to be vented through stack, which takes into account process operating schedule.

(5) Supply additional information as follows on a separate sheet if appropriate:
Stack exit configuration other than a round vertical stack. Show length and width for a rectangular stack. Indicate if discharge is horizontal.
Show layout of adjacent structures if structure is within 5 times stack height above the ground.

SECTION Z-NM. AIR POLLUTANT EMISSIONS

Completion of this section is mandatory for all sites which will have total projected actual or total actual air pollutant emissions of 1/2 ton per year or more prior to any separate tail-pipe controls.

PROVIDE A SUMMARY OF THE PROJECTED ACTUAL AIR EMISSIONS ON AN ANNUAL BASIS FOR THE FOLLOWING THREE COLUMNS:

(i) ONLY THE EQUIPMENT AND PROCESSES DESCRIBED ON THIS NOTIFICATION.

(ii) THE ENTIRE SITE PRIOR TO THE INSTALLATION OF THE EQUIPMENT AND PROCESSES DESCRIBED IN (i) ABOVE.

(iii) THE ENTIRE SITE INCLUDING THE EMISSIONS IDENTIFIED IN (i) ABOVE. NORMALLY, THIS COLUMN WILL BE THE SUM OF COLUMNS (i) AND (ii).

POLLUTANT	ACTUAL EMISSIONS OR PROJECTED ACTUAL EMISSIONS IN POUNDS PER YEAR		
	COLUMN (i)	COLUMN (ii)	COLUMN (iii)
CARBON MONOXIDE (CO)	884,600	N/A	884,600
OXIDES OF NITROGEN (NO_x)	1,720,000	N/A	1,720,000
OXIDES OF SULFUR (SO_x)	185,000	N/A	185,000
PARTICULATES OF 10 MICRONS OR SMALLER (PM_{10})	764,600	53,600	818,200
TOTAL SUSPENDED PARTICULATES (TSP), INCLUDING PM_{10}	764,600	53,600	818,200
TOTAL VOLATILE ORGANIC COMPOUNDS (VOC) EXCLUDING NON-PRECURSOR ORGANIC COMPOUNDS	288,400	7,200	295,600
LEAD			
OTHER AIR POLLUTANTS (LIST EACH ONE SEPARATELY):			

Attach detailed calculations to support the figures in the above summary tables. Do not include the emissions from motor vehicles. Include the emissions from stationary sources, portable sources, test areas, experimental facilities, evaporative losses, storage and handling losses, fuel loading and unloading losses, etc. Specifically identify the following in detailed calculations:

1. EMISSIONS FROM EACH POINT SOURCE AND EACH STACK
2. CAPTURE EFFICIENCIES
3. CONTROL EFFICIENCIES
4. OVERALL EFFICIENCIES
5. FUGITIVE EMISSIONS
6. NON-POINT (AREA) EMISSIONS

For particulate emissions, describe the types of particulates being emitted and the quantities of emissions for each type. Identify and quantify each and every type of VOC that is included in the above summary tables. "Other air pollutants" include, but are not limited to: bromine, iodine, ammonia, hydrogen sulfide, arsine, diborane, silane, acid fumes, alkaline fumes, metal fumes and any Federal Hazardous Air Pollutant that is emitted in excess of 500 pounds per year. Whenever a material is identified by a trade name, also provide its generic name and its chemical abstract service (CAS) number.

ATTACHMENT B

EMISSION RATE CALCULATIONS

Table B-1. Gila River Power Station
Short-Term Emission Rate Calculations

A. Design Data

Parameter	Units	Value
Max.DB Heat Input (per DB)	mmBtu/hr, HHV	282
Min.DB Heat Input (per DB)	mmBtu/hr, HHV	41
Max.CT Heat Input (per CT)	mmBtu/hr, HHV	1,874
Min.CT Heat Input (per CT)	mmBtu/hr, HHV	1,406
NOx SCR Eff. (CT + DB)	%	73
CO OxCat Eff.	%	80
VOC OxCat Eff.	%	30

B. CT Emission Rates (Per CT)

Mode	Units	Emission Rates				
		SO_2	NO_x	CO	PM_{10}	VOC
Uncontrolled, Normal (100% load, 17°F)	lb/hr	2.5	62.0	33.0	9.5	3.0

C. DB Emission Rates (Per DB)

Mode	Units	Emission Rates				
		SO_2	NO_x	CO	PM_{10}	VOC
Uncontrolled, Normal (100% load)	lb/mmBtu, HHV	0.001	0.080	0.050	0.010	0.010
	lb/hr	0.3	22.6	14.1	2.8	2.8

D. Permit No. V99-018, Revised Table 2 CT + DB Emission Rates (Per CT/DB Unit)

Mode	Units	Emission Rates				
		SO_2	NO_x	CO	PM_{10}	VOC
Controlled, Normal	lb/hr	2.8	22.9	9.4	12.3	4.1

E. Permit No. V99-018, Revised Table 3 CT Startup Emission Rates (Per CT)

Mode	Units	Emission Rates				
		SO_2	NO_x	CO	PM_{10}	VOC
Startup	lb/hr	N/A	230.0	100.0	N/A	21.6

F. Permit No. V99-018, Revised Table 4 CT + DB Emission Rates (Per CT/DB Unit)

Mode	Units	Emission Rates				
		SO_2	NO_x	CO	PM_{10}	VOC
Controlled, Normal	lb/hr	2.8	No Change	No Change	12.3	No Change
	lb/mmBtu	N/A	N/A	N/A	0.0085	N/A

Table B-2. Gila River Power Station
Long-Term (Annual) Emission Rate Calculations

A. Design Data

Parameter	Units	Value
DB Heat Input (per DB)	mmBtu/hr, HHV	282
DB Capacity Factor	%	50
NOx SCR Eff. (CT + DB)	%	73
NOx SCR Eff. (CT Only)	%	67
CO OxCat Eff.	%	80
VOC OxCat Eff.	%	30

B. Startup Modes:

1. Cold Start: CT has been down for 72 hours of more prior to startup.
2. Warm Start: CT has been down for >8 hours and < 72 hours prior to startup.
3. Hot Start: CT has been down for 8 hours or less prior to startup.
4. Phase 1: Prior to Mode 6.
5. Phase 2: Mode 6.

C. CEMS Data

Mode	Startup Pollutant	Startup Emission Rates (Controlled) Phase 1 (lb/hr)	Phase 2 (lb/hr)	Startup Total (lb/event)
Cold Start (~4 hours)	CO	100	100	400
	NO_x	230	80	470
Warm Start (~2 hours)	CO	100	100	200
	NO_x	230	80	310
Hot Start (~1.5 hours)	CO	100	70	135
	NO_x	100	40	120

D. CT Uncontrolled Emission Rates (Per CT)

Mode	Units	Emission Rate SO_2	NO_x	CO	PM_{10}	VOC
Uncontrolled, Normal (100% load, 73°F)	lb/hr	2.5	60.0	32.0	9.5	3.0

Table B-2. Gila River Power Station
Long-Term (Annual) Emission Rate Calculations

E. DB Uncontrolled Emission Rates (Per DB)

Mode	Units	Emission Rates				
		SO_2	NO_x	CO	PM_{10}	VOC
Uncontrolled, Normal (100% load)	lb/mmBtu, HHV	0.001	0.080	0.050	0.010	0.010
	lb/hr	0.3	22.6	14.1	2.8	2.8

F. CT + DB Controlled Annualized Emission Rates: DB @ 50% Capacity Factor (Per CT/DB Unit)

Mode	Units	Emission Rates				
		SO_2	NO_x	CO	PM_{10}	VOC
Controlled, Normal	lb/hr	2.6	21.2	7.8	10.9	3.1

G. Annual Operating Scenario No. 1: Continuous operation, no startups (Per CT/DB Unit)

Mode	Units	Emission Rates				
		SO_2	NO_x	CO	PM_{10}	VOC
Controlled, Normal	tpy	11.6	92.8	34.2	47.8	13.5

H. Annual Operating Scenario No. 2: Maximum Number of Cold Starts (Per CT/DB Unit)
(Note: Hypothetical worst-case, maximum theoretical duration in cold start mode - minimal normal operations)

Maximum No. of Cold Starts	115	starts/yr
Duration of Cold Starts	460	hr/yr (4 hrs per cold start)
Cold Start NO_x Emissions:	470	lb/cold start
Cold Start CO Emissions:	400	lb/cold start
CT + DB Downtime	8,280	hr/yr (72 hours per cold start)
Duration of Normal CT + DB Operation:	20	hr/yr

Mode	Units	Emission Rates				
		SO_2	NO_x	CO	PM_{10}	VOC
Controlled, Normal	tpy	0.0	0.2	0.1	0.1	0.0
Cold Starts	tpy	N/A	27.0	23.0	N/A	5.0
Totals	tpy	0.0	27.2	23.1	0.1	5.0

Table B-2. Gila River Power Station
Long-Term (Annual) Emission Rate Calculations

I. Annual Operating Scenario No. 3: Maximum Number of Warm Starts (Per CT/DB Unit)

Maximum No. of Warm Starts	300	starts/yr
Duration of Warm Starts	600	hr/yr (2 hrs per warm start)
Warm Start NO_x Emissions:	310	lb/warm start
Warm Start CO Emissions:	200	lb/warm start
CT + DB Downtime	2,400	hr/yr (8 hours per warm start)
Duration of Normal CT + DB Operation:	5,760	hr/yr

Mode	Units	Emission Rates				
		SO_2	NO_x	CO	PM_{10}	VOC
Controlled, Normal	tpy	7.6	61.0	22.5	31.4	8.9
Warm Starts	tpy	N/A	46.5	30.0	N/A	6.5
Totals	**tpy**	**7.6**	**107.5**	**52.5**	**31.4**	**15.4**

J. Annual Operating Scenario No. 4: Maximum Number of Hot Starts (Per CT/DB Unit)

Maximum No. of Hot Starts	365	starts/yr
Duration of Hot Starts	548	hr/yr (1.5 hrs per hot start)
Hot Start NO_x Emissions:	120	lb/hot start
Hot Start CO Emissions:	135	lb/hot start
CT + DB Downtime	365	hr/yr (1 hour per hot start)
Duration of Normal CT + DB Operation:	7,848	hr/yr

Mode	Units	Emission Rates				
		SO_2	NO_x	CO	PM_{10}	VOC
Controlled, Normal	tpy	10.4	83.1	30.6	42.8	12.1
Hot Starts	tpy	N/A	21.9	24.6	N/A	5.9
Totals	**tpy**	**10.4**	**105.0**	**55.3**	**42.8**	**18.0**

K. Maximum Annual Emissions (Per CT/DB Unit)

Maximum of Annual Operating Scenarios 1 through 4

Mode	Units	Emission Rates				
		SO_2	NO_x	CO	PM_{10}	VOC
Maximum Annual	tpy	11.6	107.5	55.3	47.8	18.0
Current Permit Limits	tpy	12.0	113.4	55.0	48.1	26.3

Table B-3. Gila River Power Station
Duct Burner and Annual Emission Rate Calculations

A. Design Data

Parameter	Units	Value
Original DB Heat Input (per DB)	mmBtu/hr, HHV	370
Revised DB Heat Input (per DB)	mmBtu/hr, HHV	282
DB Capacity Factor	%	50
Original NOx SCR Eff. (CT + DB)	%	75
Revised NOx SCR Eff. (CT + DB)	%	73
CO OxCat Eff.	%	80
VOC OxCat Eff.	%	30

B. DB Uncontrolled Emission Rates (Per DB)

Mode	Units	Emission Rates				
		SO_2	NO_x	CO	PM_{10}	VOC
Original DB - Uncontrolled, Normal	lb/mmBtu, HHV	0.001	0.080	0.100	0.008	0.020
	lb/hr	0.37	29.60	37.00	2.96	7.40
Revised DB - Uncontrolled, Normal (100% load)	lb/mmBtu, HHV	0.001	0.080	0.050	0.010	0.010
	lb/hr	0.28	22.56	14.10	2.82	2.82

C. DB Controlled Emission Rates (Per DB)

Mode	Units	Emission Rates				
		SO_2	NO_x	CO	PM_{10}	VOC
Original DB - Controlled, Normal	lb/hr	0.37	7.40	7.40	2.96	5.18
	tpy	0.8	16.2	16.2	6.5	11.3
Revised DB - Controlled, Normal (100% load)	lb/hr	0.28	6.11	2.82	2.82	1.97
	tpy	0.6	13.4	6.2	6.2	4.3
Change in Annual Emissions	tpy	-0.2	-2.8	-10.0	-0.3	-7.0

D. CT + DB Controlled Annual Emission Rates (All 8 CT/DB Units)

Mode	Units	Emission Rates				
		SO_2	NO_x	CO	PM_{10}	VOC
Original Table 1	tpy	96.0	907.2	440.0	384.8	210.4
Revised Table 1	tpy	92.5	860.0	442.3	382.3	144.2
Change in Table 1 Including DBs	tpy	-3.5	-47.2	2.3	-2.5	-66.2
Change in Table 1 Due to DBs	tpy	-1.5	-22.6	-80.2	-2.5	-56.2
Change in Table 1 Excluding DBs	tpy	-1.9	-24.6	82.5	-0.1	-10.0

BEFORE THE CONTROL OFFICER OF THE
MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT

In the Matter of:	)	**ORDER OF ABATEMENT BY CONSENT**
	)	
Panda Gila River, LP.	)	
1250 E. Watermelon Rd.	)	Number AS-025-04
P.O. Box 798	)	
Gila Bend, Arizona 85337	)	
	)	
Respondent		

I. NOTIFICATION

You are hereby notified that the Control Officer of the Maricopa County Environmental Services Department (hereinafter "MCESD") has reasonable cause to believe that Panda Gila River, LP (hereinafter "Gila River") operated in violation of Maricopa County Air Pollution Control Regulations (hereinafter "Regulation") adopted by the Maricopa County Board of Supervisors.

II. JURISDICTION

The Control Officer has jurisdiction over the subject matter of this action and is authorized to enter into this Order of Abatement by Consent (hereinafter "Order") pursuant to A.R.S. § 49-511 and Regulation I, Rule 110, Section 301, Violations; Order of Abatement.

III. FINDING OF VIOLATION

A. On October 20 and 21, 2003, MCESD inspected the Gila River Power Station ("GRPS") located at 1250 E. Watermelon Road, Gila Bend, Arizona 85337. During the inspection, MCESD reviewed startup emissions data and conducted opacity inspections. A review of the start-up data indicated that on October 21, 2003, several of the natural gas fired turbines ("Units") exceeded the hourly emission limits set forth in Table 3 of the facility's Title V Air Quality Operating Permit, No. V99018 (the "Air Permit"). The opacity inspections indicated that several of the Units exceeded the opacity limit in the Air Permit on October 20 and 21, 2003.

B. MCESD issued Gila River Notices of Violations ("NOVs") for the violations alleged in Paragraph A of this Section. MCESD also is reviewing other NOx and CO start-up

EXHIBIT 3

data for the time prior to the effective date of this Order that may result in additional NOVs being issued to Gila River.

C. As a result of Gila River's investigation and subsequent analysis, Gila River has determined that the Units are not capable of meeting the startup limits for NOx and CO set forth in Table 3 of the facility's Air Permit.

IV. TERMS AND CONDITIONS

A. MCESD agrees not to pursue criminal or civil remedies authorized by A.R.S. § 49-502 and A.R.S. § 49-513 against Gila River for violations of the NOx and CO start up limits after the effective date of this Order. MCESD agrees not to request the United States Environmental Protection Agency (hereinafter "EPA") to overfile on any violations alleged in this Order. MCESD also agrees not to request EPA to consider any other enforcement action under EPA authority for violations alleged in this Order. In no way does this Order limit the authority of EPA to bring an action on any violations alleged in this Order.

B. In return, and without admitting to the violations, Gila River agrees to comply with the terms of this Order to ensure the GRPS comes into compliance as expeditiously as possible. MCESD and Gila River agree that this Order of Abatement by Consent does not limit or prevent MCESD from pursuing enforcement action for any excess start-up emissions or other violations of Gila River's Air Permit or other applicable requirements that occurred prior to the effective date of this Order.

C. In the event that MCESD pursues legal action to enforce this Order, Gila River shall pay all attorneys' fees and all other expenses incurred by Maricopa County.

D. Pursuant to the provisions of Rule 110, Section 301 in the Regulation, Gila River is ordered to and agrees to comply with the provisions of its permit concerning NOx and CO startup emissions limits as expeditiously as possible. In order to ensure compliance as expeditiously as possible, Gila River agrees to the following compliance schedule. Gila River is authorized to continue to operate the GRPS despite start up exceedances of NOx and CO limits set forth in Table 3 of the Air Permit provided Gila River complies with the following schedule and conditions:

(1) No later than February 13, 2004, Gila River shall submit a plan to MCESD setting forth the steps Gila River will take to minimize excess emissions of NOx and CO during startup and will immediately initiate those interim steps.

(2) No later than February 13, 2004, Gila River shall submit a complete application for a permit revision (to the extent an increase in NOx and CO startup emissions limits are necessary or to the extent necessary to authorize the steps proposed by Gila River to minimize excess startup emissions). Said application shall contain necessary supporting documentation and justification and include all variations between the facility as originally permitted and the facility as constructed.

(3) Gila River agrees to respond to all requests for additional information, if any, by MCESD in an expedited and priority manner pursuant to the applicable air quality regulations relating to the permit revision application.

(4) Upon the effective date of this Order, and until the permit revision is approved or denied by MCESD, Gila River agrees to comply with the following startup NOx and CO emissions limits in lieu of the limits set forth in Table 3 of the Air Permit.

Table 3

(Interim Limits)

Hourly Emission Limits During Periods When Turbines Operate in Startup Mode

(lb/hour) (1-hour average)

Device	NOx	CO	VOC
Turbine Only Startup 1GT-TRB-1100	230	100	21.6
Turbine Only Startup 1GT-TRB-2100	230	100	21.6
Turbine Only Startup 2GT-TRB-1100	230	100	21.6
Turbine Only Startup 2GT-TRB-2100	230	100	21.6
Turbine Only Startup 3GT-TRB-1100	230	100	21.6
Turbine Only Startup 3GT-TRB-2100	230	100	21.6
Turbine Only Startup 4GT-TRB-1100	230	100	21.6
Turbine Only Startup 4GT-TRB-2100	230	100	21.6

(5) Until the permit revision is approved or denied by MCESD, Gila River shall utilize duct burners rated at 282 MMBTU/hour (HHV) in lieu of the 370 MMBTU/hour (HHV) duct burners authorized in the Air Permit.

V. GENERAL PROVISIONS

A. MCESD and Gila River are the Parties to this Order.

B. All communications with MCESD, including submittals, plans, payments, and other items arising from this Order, shall be directed to the attention of:

Robert Evans, Enforcement Manager
Maricopa County Environmental Services Department
1001 N. Central Avenue, Suite 595
Phoenix, Arizona 85004-1935

C. If any delay or anticipated delay in meeting the terms and conditions of this Order are caused by unforeseeable circumstances beyond the control of Gila River, and cannot be overcome by due diligence, the time for performance under this Order may be extended by written amendment to this Order for a period no longer than the delay resulting from such circumstances. Gila River shall notify MCESD in writing within five (5) calendar days after the date that Gila River first knew or reasonably should have known that such circumstances may or will cause a delay or anticipated delay. Economic factors shall not be considered sufficient cause for extension of deadlines established by this Order.

D. The Parties to this Order agree to take all actions reasonably necessary to comply with the terms, conditions, and provisions of the Order.

E. If, after the effective date of this Order, any provision is held to be illegal, invalid or unenforceable under present or future laws effective during the duration of this Order, such provision shall be fully severable.

F. This Order shall not be modified or amended except by written instrument signed by the Parties to this Order.

G. The laws of the State of Arizona shall govern the validity, construction, interpretation, and administration of this Order. The Parties declare that there are no other written documents between them affecting this Order; and the Parties agree that this document is the exclusive statement of the terms and conditions of this Order.

VI. APPEAL AND EFFECTIVE DATE

Gila River hereby waives its right to appeal this Order under A.R.S. § 49-490. This Order shall be effective upon the latter date of signature by the Parties. Signature by each party on any copy of this Order shall constitute signature of the Order for determining the Effective Date.

VII. RELIEF

Gila River acknowledges that any failure to comply with this Order may result in an action by MCESD for criminal or civil penalties pursuant to, but not limited to, A.R.S. § 49-502 and A.R.S. § 49-513, injunctive relief pursuant to A.R.S. § 49-512, and class 5 felony penalties for knowingly violating this Order pursuant to A.R.S. § 49-514.D.

VIII. SIGNATORIES

The undersigned representatives of MCESD and Gila River certify that they are authorized to enter into the terms and conditions of this Order and bind legally the Parties to this Order.

MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT

Signature: _____

Print Name: Robert W. Evans

Title: Enforcement Manager

Date: 2/6/04

Ratified by: _____ 2-20-04

Albert F. Brown, Control Officer

PANDA GILA RIVER, LP

Signature: _____

Print Name: John Duff

Title: Vice-President

Date: 2/7/04

GILA RIVER

Hand Delivered

February 12, 2004

Mr. Robert Evans
Maricopa County Environmental Services Department
Air Quality Division
1001 N. Central Ave.
Phoenix, AZ 85004

Re: Gila River Power Station
Permit No. V99-018
Order of Abatement by Consent AS-025-04

Dear Mr. Evans:

On behalf of Panda Gila River, L.P. (PGR), we are hereby submitting to Maricopa County Environmental Services Department (MCESD) the actions that have been taken to minimize excess emissions of NOx and CO during startup operation at the Gila River Power Station. This plan is being submitted pursuant to Condition IV.D.1 of the above referenced Order of Abatement by Consent dated February 7, 2004.

On January 5, 2003, Byron Burrows (PGR) spoke to Larry Spivack (MCESD), to follow up on earlier discussions regarding Notices of Violation (NOV's) evolving from compliance inspections on October 20 and 21, 2003. The NOV's were for two alleged opacity violations, and startup emission limit violations for nitrogen oxides (NO_x) and carbon dioxide (CO) emissions. PGR responded to the notices as required and provided some information regarding steps taken to evaluate the incidents. Since that time, PGR has thoroughly reviewed the activities associated with the NOV's and, in addition to the update provided on January 14, 2004, is submitting the changes that were implemented to ensure ongoing compliance with the requirements. The following summarizes the actions taken:

- The entire Gila River plant was taken off-line on January 8, 2003 after a determination was made that operational adjustments must be made to meet permit requirements and PGR management was apprised of the circumstances of the NOV's.

Post Office Box 798, Gila Bend, Arizona 85337
PHONE 928/ 683-0020 FAX 928/ 683-0028

- During the time the plant was taken off-line, all operating staff were trained on the importance of meeting compliance with the permit limits and the need to reduce potential startup times.

- PGR contacted the manufacturer of the gas turbines (GE) regarding the startup procedures. Based on information received from GE and a review of current plant startup procedures, it was determined that the plant was following the manufacturer's required startup procedures. However, as a result of this review, new procedures were put into place to reduce the startup time and reduce emissions during startup. One of the operational changes included preheating of the natural gas fuel at an earlier stage in the startup process to reduce startup emissions. GE lowered the minimum allowable temperature for fuel gas heating to a lower setting of 300 F vs. 360 F thereby reducing the hold time so that the unit may start ramping up sooner.

- An investigation of the existing selective catalyst reduction (SCR) NO_x control system startup procedure was also completed. This investigation determined that the ammonia injection to the SCR could be started earlier and new procedures were implemented to allow the SCR system to begin operation earlier in the startup process. PGR changed the previous ammonia injection point from a 50 Mw minimum to a minimum SCR catalyst temperature of 500 F as specified by the equipment manufacturer. This change improved NO_x control operational efficiencies. These actions are expected to ensure compliance with both NO_x startup emission and opacity limits.

- The Continuous Emissions Monitoring system (CEMS) Data Acquisition and Handling System (DAHS) was relocated next to the plant operations main control board to help facilitate compliance with the proposed permit limits.

- PGR has been communicating with GE to evaluate possible startup emissions improvements by combustion turbine tuning. PGR will contact MCESD prior to conducting any tuning activities at the plant.

- As a result of our initial investigations, it was determined that additional data was needed to help assess potential operational adjustments to improve the CO emissions during startup. To obtain this additional data, PGR submitted a request to MCESD on February 2, 2004 (see attached) to operate the gas turbine (GT), and monitor CO levels at the inlet and outlet of the CO Catalyst on GT-4A & B. The result of this test will provide data regarding performance of the GT and the control efficiency of the CO Catalyst. This information will assist in improving CO startup emission conditions identified in the referenced notice.

- PGR submitted a Non-Minor permit revision on February 10, 2004 as required by Condition IV.D.1 of the above referenced Order of Abatement by Consent dated February 7, 2004. The purpose of this submittal is to update calculations submitted with the original application and the minor modification dated January 12, 2004. The application provides updated calculations to reflect expected emission rates during startup operation for each of the eight (8) combined cycle combustion turbines and the use of smaller design heat release duct burners. The Non-Minor permit revision application seeks to correct the Nitrogen Oxides (NO_x) and Carbon Monoxide (CO) startup emission limits based upon actual continuous emissions monitoring system (CEMS) data recorded during startup, testing, and commissioning of the units.

As previously stated, the steps that have been outlined above are being taken to ensure compliance with opacity and startup emission limits as conditioned in the MCESD Order of Abatement by Consent, AS-025-04.

If you have any questions or need additional information, please call Paul Carpinone at (813) 228-4858, Byron Burrows at (813) 228-1282, or myself at (813) 228-1381.

Based on information and belief formed after reasonable inquiry, the statements and information in the attached documents are true, accurate, and complete.

Sincerely,
Panda Gila River, L.P.
a Delaware Limited Partnership

By: _____
Name: John T. Duff
Title: Vice President

cc: Phil Fargotstein, Fennemore Craig
Dan Baerman, TPS Arizona Operations Co.

Attachments

GILA RIVER POWER STATION

Via Facsimile

February 2, 2004

Mr. Larry Spivack, Manager
Marioopa County Environmental Services Department
Air Quality Division, Compliance Inspection Section
1001 N. Central Ave., Suite 201
Phoenix, AZ 85004

Re: Gila River Power Station
Permit No. V99-018
Notification of Violation
Operation of Gas Turbine Unit GT-4A & B

Dear Mr. Spivack:

Per your conversation with Paul Carpinone on January 27, 2004, Panda Gila River, L. P. (PGR) has been investigating operational issues associated with startup emission exceedances identified in the above referenced notice at the plant. As outlined in our previous letter of January 15, 2004, PGR is considering various measures to prevent exceedances of emissions during startup.

As a result of our initial investigations, it has been determined that additional data is needed to help assess a potential correction or operational adjustments needed to control the carbon monoxide (CO) levels during startup. To obtain this additional data, PGR will need to operate the gas turbine (GT), and monitor CO levels at the inlet and outlet of the CO Catalyst on GT-4A & B as follows:

- Commence start of GT
- GT will come to Full Speed No Load in approximately 30 minutes
- Synchronize GT with the Grid
- Operate GT at approximately 15 MW to 18 MW for a controlled heat-up
- Complete the controlled heat-up in approximately 2 hours
- GT load will be maintained at approximately 15 MW to 20 MW until temperatures stabilize in the HRSG.

- CO instrument will collect pre-catalyst (turbine exhaust) CO levels from the inlet side of the CO Catalyst
- Shutdown GT (Estimated Test Time: 4 hours)

The result of this test will provide data regarding performance of the GT and the control efficiency of the CO Catalyst. This information will assist in resolving the startup emission exceedances identified in the referenced notice. During this test period, it is expected that occasional exceedances of the CO lbs/hr start-up limits for GT may occur.

It is my understanding from your conversation with Paul Carpinone that the Maricopa County Environmental Services Department would like a written request to allow PGR to perform the test procedure as outlined above without incurring penalties if exceedances occur during the test.

If you have any questions regarding this request, or need any additional information please call Paul Carpinone at 813-228-4858 or Byron Burrows at 813-228-1282.

Sincerely,

Panda Gila River, L.P.,
a Delaware limited partnership

By: Panda Gila River I, LLC
a Delaware limited liability company

By: _____
Name: John T. Duff
Title: Vice President

cc: Mr. Robert Evans, Maricopa County

Maricopa County Natural Gas -Fired Combined Cycle Combustion Turbine Power Plants
Comparison of Hourly Startup Emission Limits

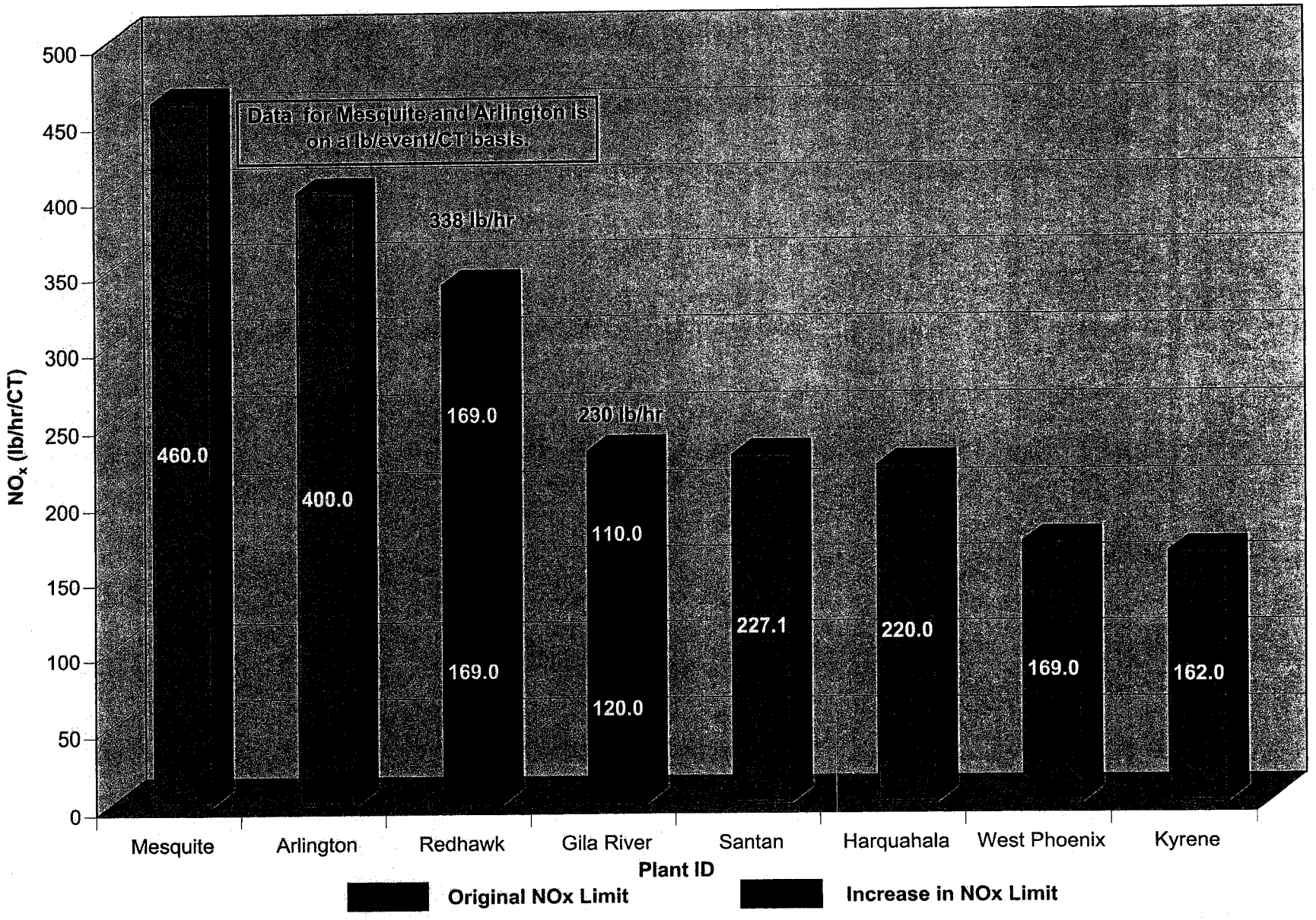
Plant Name	Permit No.	Turbine Make - Model	Rating Per CT (MW)	Startup Emission Limits, Per CT				
				NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)	SO_2 (lb/hr)	PM_{10} (lb/hr)
Arlington Valley Energy Project	V95-008	GE 7FA	170.0	400[(a)]	1,260.0	71[(a)]	-	-
Harquahala Generating Company	V99-015	SW 501G	240.0	220.0	2,300.0	440.0	-	-
Kyrene Generating Station (K-7)	V99-014	GE 7F	175.0	162.0	760.2	93.3	-	-
Mesquite Generating Station	V99-017	GE 7FA	180.0	460[(b)]	130.0	100[(b)]	1.0	18.0
Redhawk Generating Facility	V99-013	GE 7FA	175.0	338.0	870.0	29.0	1.1	18.3
Santan Generating Station	V95-006	GE 7FA	175.0	227.1	760.2	94.3	-	-
West Phoenix Power Plant (CC5)	V95-009	F Class	175.2	169.0	870.0	29.0	1.0	8.0
Gila River Power Station (Current)	V99-018	GE 7FA	170.0	120.0	42.4	21.6	-	-
Gila River Power Station (Proposed)	V99-018	GE 7FA	170.0	230.0	100.0	21.6	-	-
Plant Data Summary (excluding GRPS)			Avg.	223.2	992.9	137.1	1.0	14.8
			Min.	162.0	130.0	29.0	1.0	8.0
			Max.	338.0	2,300.0	440.0	1.1	18.3

Note:
[(a)] Permit startup limit is on a pound per event for two CTs. Data shown in table is equivalent value for one CT.
[(b)] Permit startup limit is on a pound per event for two combustion turbines (CTs) for an extended (cold) start. Data shown in table is equivalent value for one CT.

Sources: MCESD, 2004.
ECT, 2004.

EXHIBIT 5

Mariocopa County NO_x Startup Emission Limits
Combined Cycle Combustion Turbines



Maricopa County CO Startup Emission Limits
Combined Cycle Combustion Turbines